



Western Nevada College

ASSOCIATE OF APPLIED
SCIENCE - TECHNOLOGY

PROGRAM REVIEW

2018

Reporting Elements Template
(Please type your responses in the space available)

Technology Program:

Automated Systems

1. Program Description

A. College and Program Mission: The college mission and program mission are presented side-by-side in a table to show how the college and program missions align. The program mission states the purpose of the program; names its primary functions, activities and stakeholders; Supports the college mission; and is distinctive.

College Mission

Western Nevada College inspires success in our community through opportunities that cultivate creativity, intellectual growth and technological excellence, in an environment that nurtures individual potential and respects differences.

Program Mission (*What is the mission of your program?*) *These can also be found on MyWNC*

The Associate of Applied Science Technology degree in Automated Systems will provide employment-related knowledge and skills necessary to succeed in the automated systems field by meeting employer-driven criteria and preparing students for industry certification.

B. College and Program Goals: The College Strategic Goals and the program goals and related outcomes are presented side-by-side in a table to show how they align. Also indicate any linkage to ISLOs (Institutional Student Learning Outcomes) by indicating this alignment with the following shorthand, in parenthesis, next to the aligned program outcome (ISLO x , where x indicates the number of the ISLO).

College Goals

- Improve student success in program completion and graduation rates
- Ensure institutional excellence in teaching, programs and services
- Embrace our college's many communities and respond to their diverse needs.

Program Goals and Outcomes (*What are the Goals and Outcomes of your program?*)

Students who complete this AAS Technology degree in Automated Systems are expected to demonstrate that they:

Reporting Elements Template

(Please type your responses in the space available)

- Know the subject matter appropriate to contemporary automated systems (SLO 1, 3, 4, 6, 7).
- Are able to communicate effectively and appropriately, in oral and written form (SLO 1, 2, 7).
- Are able to locate, evaluate and properly utilize the tools and resources appropriate to an automated systems technology professional (SLO 4, 7).
- Are able to acquire skills and perform tasks necessary for employment or career enhancement utilizing automated systems (SLO 1, 2, 3, 4, 6, 7).

C. Short Description: Include the following information and append supporting documents as appropriate:

i. Unique characteristics

This degree develops knowledge and skills for the automated environment where the integration of computers and electronic technologies control industrial systems and machines in manufacturing, distribution, and logistics environments. Industry certification opportunities embedded into college coursework provide students with career-enhancing options in addition to knowledge and skills.

ii. Concerns or trends affecting the program

In environments that change and evolve rapidly, this degree provides students with technical theory and hands-on practice to install, operate, and maintain automated systems for a variety of industries.

iii. Significant changes or needs in the next five years

This program will require updates of and additions to equipment and class materials every year to stay current with industry trends and local developments.

Matrix Spreadsheet – Separate Document

D. Program SLO/Required Course Matrix: Attach to the report this matrix which maps the student learning outcomes to required courses and shows the degree to which a course addresses an outcome. The matrix should reflect required courses and SLOs for the 2017-2018 catalog. When changes are made to the curriculum, Program SLO/Course Matrices are to be updated and submitted to Institutional Research for publication on the college website.

E. Degrees and/or Certificates Offered: List degrees or certificates that are being evaluated for the purposes of this program review.

AAS Technology: Automated Systems

F. Niches Served: Describe any niches in the community the program serves, including other academic programs served by program core courses.

This program is designed to provide both depth and breadth in emerging fields and with evolving technology. The coursework is both foundational and contemporary to ensure its value for a student just entering the field as well as for a technician returning to college to update their career skills and knowledge.

Reporting Elements Template

(Please type your responses in the space available)

2. Quality of Program

A. Evidence of Effectiveness

i. Course Scheduling/Enrollment History Report: *Institutional Research* provides this spreadsheet, which includes course scheduling history and enrollment figures for the most recent four-year period. This report is used to satisfy item #5 of the Curriculum Review Report portion of the program review report.

ii. Summary Data Sheet: *Institutional Research* provides the Summary Data Sheet, a document that provides information on the headcount of students who have declared majors in the program, number of degrees and certificates granted, successful course completion data, student credit hours data, FTE, FTE faculty, workload ratios, and other information that provides a basis for demonstrating program efficiency and effectiveness.

iii. Systematic Assessment: (*This is what is generated from your yearly JOT Form submissions*)

<https://form.jotform.us/71906990133156>

Instructional programs must include evidence that they systematically assess program outcomes and student learning outcomes and that data from assessments are used to make improvements to programs. The final program review report should include the Five-Year Assessment Plan. The report should also indicate the steps taken to make the student learning outcomes public and available to students.

B. Evidence of Satisfaction: Instructional programs may include additional hard data regarding student satisfaction with courses and programs, employer satisfaction studies, etc., as indicators of effectiveness of the program. Results from the Noel-Levitz Student Satisfaction Inventory (2007 and 2009) and the Community College Survey of Student Engagement (2008 and 2012) can be broken out by declared major and are available upon request. Summarized results from Revised and approved May 19, 2017 student course evaluations are another source of satisfaction evidence, and instructors can add one question of their choice to the evaluations. The chair of the PRT should consult with Institutional Research regarding the availability of data.

C. Certifications/Licenses: Instructional programs need to explain if there are special certifications or accreditations available to the program and the status of the program relative to these certifications or accreditations.

Reporting Elements Template

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D. Enrollment Trends: Instructional programs should discuss general student demographics and enrollment trends outlined by the following questions:

a. What student demographic and enrollment trends are most notable?

Students in this program tend to be adults who are coming to college, sometimes for the first time, to improve their career options. The Automated Systems specialization is attractive to technicians working in the field who are encountering automated tasks and enhanced equipment on the job, and to individuals who want to get started in the fields of industrial technology such as advanced manufacturing.

b. What groups constitute the program's main demographic?

Males and females between 25-45.

c. What efforts have been made by the program to recruit students?

This degree program is included in frequent presentations and tours that involve the Applied Industrial Technology areas of study for the public and for targeted groups. This program has a heavy social media presence and our partnerships with industry giants ensure that potential students associate us with internationally recognized equipment and software.

d. What initiatives have been undertaken to increase FTE?

This degree program is presented as the appropriate path for students who express interest in fields that involve hands-on activities in an industrial environment and who are interested in automation technologies such as robotics or machine vision. This is a somewhat flexible degree plan for students who have identified their interests in electrical, electronic, or automated systems.

e. What initiatives have been undertaken to improve student retention?

This program is grounded in fundamentals but forward leaning, and its relevance is seen through clear ties to local industry while students prepare to earn their Manufacturing Technician credential as part of this program. We maintain partnerships with high visibility employers and brand name equipment and software, ensure students have access to these connections, and offer this and other internationally recognized certification programs not available elsewhere in the region.

(Separate Word Document)

E. Need for the Program: Explain the need and basis for determining the need for the program. Objective data, such as alumni studies, employer perceptions, data on transfer or transfer potential, local employment opportunities, and studies commissioned by WNC or NSHE, should be included when possible.

F. Curriculum Review Report: Attach to this report the Curriculum Review Report and the Curriculum Committee Program Evaluation (the committee's response to the Curriculum Review Report).

Reporting Elements Template

(Please type your responses in the space available)

G. Findings and Recommendations: Present the PRT's commendations and recommendations that are the result of the self-study process. If the review recommends any changes to the program, a detailed description of the specific plan of action to implement the recommendations and a timeline for implementation of the plan are required.

The Associates of Applied Science: Technology degree in Automated Systems offers above entry-level position opportunities to technicians working to install, maintain, configure, and upgrade components and equipment including robotics and electronic systems for a variety of industries. The Bureau of Labor Statistics predicts 7% growth in the field of industrial machine mechanics and equipment maintenance¹. The WNC program in this content area provides hands-on skill practice that ensures a solid foundation in knowledge and demonstrated competencies needed in the workplace.

1. <https://www.bls.gov/ooh/installation-maintenance-and-repair/industrial-machinery-mechanics-and-maintenance-workers-and-millwrights.htm>

Associate of Applied Science, Technology: Automated Systems

Student Learning Outcomes Matrix

AAS Technology: Automated Systems Degree

| Outcomes | Upon completing a degree at WNC, students must demonstrate: |
|----------|--|
| 1 | WORKING KNOWLEDGE– Identify, describe, and apply information, theories, methodologies and approaches from the sciences, social sciences, and humanities/arts. |
| 2 | WRITTEN COMMUNICATION – Write effective projects, papers, and reports. |
| 3 | QUANTITATIVE LITERACY – Present accurate calculations and symbolic operations, and explain how such calculations and operations are used in either the specific field of study or in interpreting information in other fields. |
| 4 | INFORMATION LITERACY – Locate, evaluate, and appropriately use information from multiple resources to complete projects, activities, and papers. |
| 5 | DIVERSITY AND SOCIETY – Describe diverse historical and/or contemporary positions on selected democratic values or practices. |
| 6 | CRITICAL THINKING – Integrate knowledge and skills from the study of sciences, mathematics, social sciences, and the humanities/arts to think critically about and develop solutions to contemporary and/or enduring problems. |
| 7 | CAREER PREPARATION – Identify, describe, and apply information in the discipline or career area of their choice sufficient for further study and/ or demonstrate competencies required to succeed in the workplace. |

| Required Courses | | Outcomes | | | | | | |
|------------------|---|----------|---|---|---|---|---|---|
| Course # | Name | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| AIT 101 | Fundamentals of Applied Industrial Technology | X | | X | X | | X | X |
| AIT 155 | AIT Hands-On Labs | X | X | X | X | | X | X |
| DFT 110 | Blueprint Reading for Industry | X | | | X | | | X |
| ET 104 | Fabrication and Soldering Techniques | X | | | X | | X | X |
| ET 131 | DC for Electronics | X | | X | X | | X | X |
| ET 132 | AC for Electronics | X | | X | X | | X | X |
| MT 115 | Applied Programmable Logic Controllers | X | | X | X | | X | X |

WNC Total Enrollment in Classes by Location, Instruction Mode, Day of the Week and Time of Day

| GRAND TOTAL | | | | | | | | | | | | | | | | | | | | | |
|-------------|------------------------------|-----------------|---------|--------|--------|---------|--------|--------|---------|--------|--------|---------|--------|--------|---------|--------|--------|---------|--------|--------|----------|
| CLASS | CLASS TITLE | MODE | Fall 11 | Spr 12 | Sum 12 | Fall 12 | Spr 13 | Sum 13 | Fall 13 | Spr 14 | Sum 14 | Fall 14 | Spr 15 | Sum 15 | Fall 15 | Spr 16 | Sum 16 | Fall 16 | Spr 17 | Sum 17 | ENROLLED |
| AIT 101 | Fund of Industrial Tech | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| AIT 101 | Fund of Industrial Tech | Online | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| AIT 101 | Fund of Industrial Tech | In person | 0 | 0 | 0 | 4 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| AIT 101 | Fund of Industrial Tech | Online | 0 | 6 | 6 | 0 | 14 | 4 | 0 | 6 | 0 | 0 | 24 | 5 | 35 | 28 | 8 | 54 | 21 | 8 | 219 |
| AIT 121 | Electrical Control Systems | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 18 |
| AIT 121 | Electrical Control Systems | Online | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 13 | 0 | 0 | 23 |
| AIT 155 | AIT Hands On Lab | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 22 |
| AIT 155 | AIT Hands On Lab | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 8 |
| AIT 155 | AIT Hands On Lab | In person | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 2 | 0 | 5 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| AIT 155 | AIT Hands On Lab | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 20 |
| AIT 155 | AIT Hands On Lab | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 |
| AIT 155 | AIT Hands On Lab | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 |
| AIT 155 | AIT Hands On Lab | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 9 | 5 | 0 | 25 |
| AIT 155 | AIT Hands On Lab | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 6 |
| AIT 155 | AIT Hands On Lab | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 17 |
| AIT 155 | AIT Hands On Lab | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 13 | 0 | 30 |
| ET 104 | Fabrication & Soldering Tech | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 11 |
| ET 104 | Fabrication & Soldering Tech | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 |
| ET 131 | Dc for Electronics | In person | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| ET 131 | Dc for Electronics | Online | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| ET 131 | Dc for Electronics | Online | 14 | 0 | 0 | 26 | 0 | 0 | 28 | 0 | 0 | 19 | 0 | 0 | 18 | 12 | 0 | 11 | 0 | 0 | 128 |
| ET 132 | Ac for Electronics | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| ET 132 | Ac for Electronics | Online | 0 | 9 | 0 | 0 | 23 | 0 | 0 | 13 | 0 | 0 | 12 | 0 | 15 | 6 | 0 | 11 | 0 | 0 | 89 |
| MT 115 | Applied PLC I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| MT 115 | Applied PLC I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 9 | 0 | 18 |
| MT 115 | Applied PLC I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| CADD 100 | Intro to Comp Aid Dft | In person | 0 | 0 | 0 | 21 | 17 | 0 | 17 | 18 | 0 | 16 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 109 |
| CADD 100 | Intro to Comp Aid Dft | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 18 |
| CADD 100 | Intro to Comp Aid Dft | In person | 17 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| CADD 245 | Solid Modeling and Design | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 10 |
| CADD 245 | Solid Modeling and Design | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 11 | 0 | 22 |
| CIT 161 | Essentials Info Security | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| CIT 161 | Essentials Info Security | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 |
| CIT 161 | Essentials Info Security | Lecture Capture | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| CIT 161 | Essentials Info Security | Online | 32 | 0 | 24 | 33 | 0 | 16 | 33 | 0 | 0 | 45 | 22 | 0 | 24 | 15 | 6 | 22 | 21 | 0 | 293 |
| DFT 110 | Blueprint Read/Indust | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 17 |
| DFT 110 | Blueprint Read/Indust | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 16 | 0 | 13 | 13 | 0 | 51 |
| DFT 110 | Blueprint Read/Indust | In person | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 52 |
| DFT 110 | Blueprint Read/Indust | In person | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 12 | 0 | 81 |
| DFT 110 | Blueprint Read/Indust | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |

WNC Course Success Rates by Academic Year (fall, spring, and summer)

(Total students with C- and above, P, or S grades/total enrolled after removing audits, incompletes and missing grades. Must have at least a total of 10 students enrolled.)

| Division | Subject | Catalog No Title | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | Total_Enrolled |
|-----------------------|---------|----------------------------------|---------|---------|---------|---------|---------|----------------|
| Career & Technical Ed | AIT | 101 Fund of Industrial Tech | 81.8 | 69.2 | 59.5 | 71.8 | 61.7 | 237 |
| Career & Technical Ed | AIT | 121 Electrical Control Systems | | | 80.0 | 77.8 | 58.3 | 40 |
| Career & Technical Ed | AIT | 155 AIT Hands On Lab | | 87.5 | 90.9 | 78.0 | 86.8 | 146 |
| Career & Technical Ed | ET | 104 Fabrication & Soldering Tech | | | 100.0 | 87.5 | 87.5 | 19 |
| Career & Technical Ed | ET | 131 Dc for Electronics | 76.9 | 52.0 | 84.2 | 76.7 | 63.6 | 136 |
| Career & Technical Ed | ET | 132 Ac for Electronics | 69.6 | 68.4 | 91.7 | 71.4 | 63.6 | 86 |
| Career & Technical Ed | MT | 115 Applied PLC I | | 80.0 | 100.0 | 88.9 | 88.9 | 24 |
| Career & Technical Ed | CADD | 100 Intro to Comp Aid Dft | 70.5 | 62.5 | 64.7 | 85.0 | 76.5 | 138 |
| Career & Technical Ed | CADD | 245 Solid Modeling and Design | | | | 89.5 | 100.0 | 29 |
| Career & Technical Ed | CIT | 161 Essentials Info Security | 65.3 | 80.6 | 76.1 | 73.5 | 75.6 | 246 |
| Career & Technical Ed | DFT | 110 Blueprint Read/Indust | 75.0 | 80.0 | 87.0 | 90.6 | 84.6 | 196 |

WNC Students Enrolled by Course and Academic Year (fall, spring, summer)

| Division | Subject | Catalog No | Title | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|-----------------------|---------|------------|------------------------------|---------|---------|---------|---------|---------|
| Career & Technical Ed | AIT | 101 | Fund of Industrial Tech | 22 | 26 | 37 | 71 | 83 |
| Career & Technical Ed | AIT | 121 | Electrical Control Systems | 0 | 0 | 10 | 18 | 13 |
| Career & Technical Ed | AIT | 155 | AIT Hands On Lab | 0 | 8 | 11 | 59 | 69 |
| Career & Technical Ed | ET | 104 | Fabrication & Soldering Tech | 0 | 0 | 3 | 8 | 8 |
| Career & Technical Ed | ET | 131 | Dc for Electronics | 26 | 50 | 19 | 30 | 11 |
| Career & Technical Ed | ET | 132 | Ac for Electronics | 23 | 19 | 12 | 21 | 11 |
| Career & Technical Ed | CIT | 161 | Essentials Info Security | 49 | 36 | 67 | 49 | 46 |
| Career & Technical Ed | MT | 115 | Applied PLC I | 0 | 5 | 1 | 9 | 9 |
| Career & Technical Ed | CADD | 100 | Intro to Comp Aid Dft | 45 | 41 | 17 | 20 | 18 |
| Career & Technical Ed | CADD | 245 | Solid Modeling and Design | 0 | 0 | 0 | 21 | 11 |
| Career & Technical Ed | DFT | 110 | Blueprint Read/Indust | 20 | 25 | 46 | 54 | 52 |

WNC Degrees and Certificates of Achievement by Fiscal Year

[illegible]

WNC Declared Majors Enrolled as of October 15 or March 15 by Semester

| Division | Degree | Declared Major | Fall 2013 | Spr 2014 | Fall 2014 | Spr 2015 | Fall 2015 | Spr 2016 | Fall 2016 | Spr 2017 | Fall 2017 |
|-----------------------|--------|--------------------------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|
| Career & Technical Ed | AAS | Technology - Automated Systems | 0 | 8 | 11 | 11 | 23 | 23 | 29 | 22 | 15 |

Reporting Elements Template
(Please type your responses in the space available)

Technology Program:
Automotive Repair Technology

1. Program Description

A. College and Program Mission: The college mission and program mission are presented side-by-side in a table to show how the college and program missions align. The program mission states the purpose of the program; names its primary functions, activities and stakeholders; Supports the college mission; and is distinctive.

College Mission

Western Nevada College inspires success in our community through opportunities that cultivate creativity, intellectual growth and technological excellence, in an environment that nurtures individual potential and respects differences.

Program Mission

The Automotive program at WNC is committed to offering high level Automotive training that is coherent with industry standards. It is our goal to prepare students for ASE certification and give them the necessary skills to be qualified to enter the workforce. We strive to instill confidence, respect and responsibility that will lead to success in a customer focused environment.

B. College and Program Goals: The College Strategic Goals and the program goals and related outcomes are presented side-by-side in a table to show how they align. Also indicate any linkage to ISLOs (Institutional Student Learning Outcomes) by indicating this alignment with the following shorthand, in parenthesis, next to the aligned program outcome (ISLO x , where x indicates the number of the ISLO).

College Goals

- Improve student success in program completion and graduation rates
- Ensure institutional excellence in teaching, programs and services
- Embrace our college's many communities and respond to their diverse needs.

Reporting Elements Template

(Please type your responses in the space available)

Program Goals and Outcomes *(What are the Goals and Outcomes of your program?)*

- Students will be proficient in the eight areas of automotive repair as outlined by ASE standards.
- Students will learn the systematic approach for solving automotive repair problems through the use of electronic repair information, modern tools and equipment and proper parts acquisition procedures.
- Students will be able to effectively communicate with customers who are in need of vehicle service.

C. Short Description: Include the following information and append supporting documents as appropriate:

i. Unique characteristics

The WNC Automotive program is a state of the art fully operational repair facility. We are able to combine high quality instruction with live repair work that gives students a real world experience in the area of automotive repair. .

ii. Concerns or trends affecting the program

One concern to date is the lack of full time instructors to manage and improve the vast scope of tasks which revolve around the ever changing industry of automotive repair. Another concern is the trend for students to have an consistently decreasing desire to engage in physical hands-on activity. This is contributing to fewer students enrolling in the program.

iii. Significant changes or needs in the next five years

The Automotive program will need to shift to more employment focused program and less degree based. The number of AAS graduates focusing in Automotive has declined steadily over the past decade. The Automotive industry has experienced a vacuum for qualified technicians and we need to find individuals who are interested in filling this need. The industry of Automotive repair does not fit the paradigm of a degree seeking student. Our attempts to cater to both the vocational and degree bound student has caused us to be successful at neither. Our program needs to be self contained in the instruction of related skills necessary to be successful in the industry including instruction in communication, reading, writing, math and human relations as it pertains to this profession.

Matrix Spreadsheet – Separate Document

D. Program SLO/Required Course Matrix: Attach to the report this matrix which maps the student learning outcomes to required courses and shows the degree to which a course addresses an outcome. The matrix should reflect required courses and SLOs for the 2017-2018 catalog. When changes are made to the curriculum, Program SLO/Course Matrices are to be updated and submitted to Institutional Research for publication on the college website.

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E. Degrees and/or Certificates Offered: List degrees or certificates that are being evaluated for the purposes of this program review.

The WNC automotive program offers a 60 unit AAS degree which consists of 36 units of automotive specific courses.

The program also offers professional certification through ASE and administers the exams for students in house at the end of every semester.

F. Niches Served: Describe any niches in the community the program serves, including other academic programs served by program core courses.

Niches served include High School students who are enrolled in the Jump Start automotive program. Also, adult students who want to be trained to enter the automotive repair industry in a short amount of time find success in gaining employment after one year of automotive classes.

2. Quality of Program

A. Evidence of Effectiveness

i. Course Scheduling/Enrollment History Report: *Institutional Research* provides this spreadsheet, which includes course scheduling history and enrollment figures for the most recent four-year period. This report is used to satisfy item #5 of the Curriculum Review Report portion of the program review report.

ii. Summary Data Sheet: *Institutional Research* provides the Summary Data Sheet, a document that provides information on the headcount of students who have declared majors in the program, number of degrees and certificates granted, successful course completion data, student credit hours data, FTE, FTE faculty, workload ratios, and other information that provides a basis for demonstrating program efficiency and effectiveness.

iii. Systematic Assessment: (*This is what is generated from your yearly JOT Form submissions*) Please see jotform submission from 2017

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Instructional programs must include evidence that they systematically assess program outcomes and student learning outcomes and that data from assessments are used to make improvements to programs. The final program review report should include the Five-Year Assessment Plan. The report should also indicate the steps taken to make the student learning outcomes public and available to students.

B. Evidence of Satisfaction: Instructional programs may include additional hard data regarding student satisfaction with courses and programs, employer satisfaction studies, etc., as indicators of effectiveness of the program. Results from the Noel-Levitz Student Satisfaction Inventory (2007 and 2009) and the Community College Survey of Student Engagement (2008 and 2012)

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can be broken out by declared major and are available upon request. Summarized results from Revised and approved May 19, 2017 student course evaluations are another source of satisfaction evidence, and instructors can add one question of their choice to the evaluations. The chair of the PRT should consult with Institutional Research regarding the availability of data.

C. Certifications/Licenses: Instructional programs need to explain if there are special certifications or accreditations available to the program and the status of the program relative to these certifications or accreditations.

D. Enrollment Trends: Instructional programs should discuss general student demographics and enrollment trends outlined by the following questions:

a. What student demographic and enrollment trends are most notable?

The most notable enrollment trends are students who are not typically successful in academic areas. Their ability towards mechanical aptitude and kinesthetic learning styles draw them towards automotive.

b. What groups constitute the program's main demographic?

The demographics of the program do not fit any specifics that I am able to identify. The only demographic characteristic that seems consistent is that student makeup seems to be typically males.

c. What efforts have been made by the program to recruit students?

The primary focus of recruitment is visitations to local High Schools. In addition, we arrange for field trips for students to visit our program. We submit program highlights to our in house marketing team which is usually published in local newspapers.

d. What initiatives have been undertaken to increase FTE?

The most significant initiative has been to implement the Jump Start program.

e. What initiatives have been undertaken to improve student retention?

Student retention has been difficult to measure since there is such a vast difference between student goals for enrolling in the program. Many students never intend to pursue the AAS degree and are content with taking a few classes to gain the knowledge in the area of their

Reporting Elements Template

(Please type your responses in the space available)

choosing. We have an informal system of identifying what goals the students have in relation this program and making sure that those goals are met by directing them to the proper courses.

(Separate Word Document)

E. Need for the Program: Explain the need and basis for determining the need for the program. Objective data, such as alumni studies, employer perceptions, data on transfer or transfer potential, local employment opportunities, and studies commissioned by W NC or NSHE, should be included when possible.

F. Curriculum Review Report: Attach to this report the Curriculum Review Report and the Curriculum Committee Program Evaluation (the committee's response to the Curriculum Review Report).

G. Findings and Recommendations: Present the PRT's commendations and recommendations that are the result of the self-study process. If the review recommends any changes to the program, a detailed description of the specific plan of action to implement the recommendations and a timeline for implementation of the plan are required.

Associate of Applied Science, Automotive Repair Technology

Student Learning Outcomes Matrix

Automotive Repair Technology, AAS Degree

| Outcomes* | | | | |
|------------------|-------------------------------|--|---|---|
| 1 | | Students will be proficient in tahe eight areas of automotive repair as outlined by ASE standards | | |
| 2 | | Students will learn the systematic approach for solving automotive repair problems through the use of electronic repair information, modern tools and equipment and proper parts acquisition procedures. | | |
| 3 | | Students will be able to effecively communicate with customers who are in need of vehicle service. | | |
| Required Courses | | Outcomes | | |
| Course # | Name | 1 | 2 | 3 |
| AUTO 101 | INTRO TO AUTO MECHANICS | X | X | X |
| AUTO 115 | AUTOMOTIVE ELECTRIAL I | | X | X |
| AUTO 117 | AUTOMOTIVE ELECTRICAL II | | X | X |
| AUTO 130 | ENGINE REPAIR | | X | X |
| AUTO 145 | AUTOMOTIVE BRAKE SYSTEMS | | X | X |
| AUTO 155 | STEERING AND SUSPENSION | | X | X |
| AUTO 160 | HEATING AND AIR CONDITIONING | | X | X |
| AUTO 210 | AUTOMATIC TRANSMISSION REPAIR | | X | X |
| AUTO 225 | ENGINE PERFORMANCE I | | X | X |
| AUTO 227 | ENGINE PERFORMANCE 11 | | X | X |

WNC Total Enrollment in Classes by Location, Instruction Mode, Day of the Week and Time of Day

| GRAND TOTAL ENROLLED | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|-----------------------|-----------|---------|--------|--------|---------|--------|--------|---------|--------|--------|---------|--------|--------|---------|--------|--------|---------|--------|--------|----------|
| CLASS | CLASS TITLE | MODE | Fall 11 | Spr 12 | Sum 12 | Fall 12 | Spr 13 | Sum 13 | Fall 13 | Spr 14 | Sum 14 | Fall 14 | Spr 15 | Sum 15 | Fall 15 | Spr 16 | Sum 16 | Fall 16 | Spr 17 | Sum 17 | ENROLLED |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| AUTO 101 | Intro to General Mech | In person | 0 | 16 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 |
| AUTO 101 | Intro to General Mech | In person | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 9 |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 6 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 25 |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| AUTO 101 | Intro to General Mech | In person | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 0 | 18 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 14 |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 9 | 6 | 0 | 23 |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 18 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 12 |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 11 | 0 | 0 | 0 | 19 |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 20 |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 5 | 0 | 0 | 16 |
| AUTO 101 | Intro to General Mech | In person | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| AUTO 115 | Auto Elect I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 8 | 0 | 0 | 18 |
| AUTO 115 | Auto Elect I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| AUTO 115 | Auto Elect I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 7 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 27 |
| AUTO 115 | Auto Elect I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| AUTO 115 | Auto Elect I | In person | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| AUTO 115 | Auto Elect I | In person | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| AUTO 115 | Auto Elect I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 7 |
| AUTO 115 | Auto Elect I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| AUTO 115 | Auto Elect I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 10 |
| AUTO 115 | Auto Elect I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| AUTO 117 | Adv Auto Elect | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| AUTO 117 | Adv Auto Elect | In person | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| AUTO 117 | Adv Auto Elect | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 |
| AUTO 117 | Adv Auto Elect | In person | 0 | 8 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| AUTO 117 | Adv Auto Elect | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| AUTO 117 | Adv Auto Elect | In person | 0 | 8 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| AUTO 117 | Adv Auto Elect | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 12 |
| AUTO 130 | Engine Reconditioning | In person | 17 | 17 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 |
| AUTO 130 | Engine Reconditioning | In person | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| AUTO 130 | Engine Reconditioning | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 0 | 0 | 18 |
| AUTO 130 | Engine Reconditioning | In person | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| AUTO 130 | Engine Reconditioning | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 7 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 26 |
| AUTO 130 | Engine Reconditioning | In person | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| AUTO 130 | Engine Reconditioning | In person | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 8 | 0 | 9 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44 |
| AUTO 130 | Engine Reconditioning | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 7 |
| AUTO 145 | Auto Brakes | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 10 | 0 | 0 | 17 |
| AUTO 145 | Auto Brakes | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 7 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 27 |
| AUTO 145 | Auto Brakes | In person | 0 | 19 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| AUTO 145 | Auto Brakes | In person | 0 | 19 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| AUTO 145 | Auto Brakes | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 6 |

| | | | | | | | | | | | | | | | | | | | | |
|----------|---------------------------|-----------|----|----|---|----|----|---|----|----|---|----|----|---|----|---|---|----|---|----|
| AUTO 145 | Auto Brakes | In person | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| AUTO 145 | Auto Brakes | In person | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| AUTO 145 | Auto Brakes | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 7 |
| AUTO 145 | Auto Brakes | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| AUTO 145 | Auto Brakes | In person | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| AUTO 145 | Auto Brakes | In person | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| AUTO 155 | Steering & Suspension | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| AUTO 155 | Steering & Suspension | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 10 | 0 | 18 |
| AUTO 155 | Steering & Suspension | In person | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| AUTO 155 | Steering & Suspension | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 7 | 0 | 9 | 0 | 0 | 0 | 0 | 27 |
| AUTO 155 | Steering & Suspension | In person | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| AUTO 155 | Steering & Suspension | In person | 0 | 16 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| AUTO 155 | Steering & Suspension | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 |
| AUTO 155 | Steering & Suspension | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 21 |
| AUTO 155 | Steering & Suspension | In person | 0 | 16 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| AUTO 155 | Steering & Suspension | In person | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| AUTO 160 | Auto Air Cond & Heating | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 7 | 0 | 0 | 13 |
| AUTO 160 | Auto Air Cond & Heating | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| AUTO 160 | Auto Air Cond & Heating | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| AUTO 160 | Auto Air Cond & Heating | In person | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| AUTO 160 | Auto Air Cond & Heating | In person | 18 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 |
| AUTO 160 | Auto Air Cond & Heating | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 6 |
| AUTO 210 | Auto Trans & Transaxles I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| AUTO 210 | Auto Trans & Transaxles I | In person | 0 | 0 | 0 | 0 | 16 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| AUTO 210 | Auto Trans & Transaxles I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 |
| AUTO 210 | Auto Trans & Transaxles I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| AUTO 210 | Auto Trans & Transaxles I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 7 | 0 | 9 | 0 | 0 | 0 | 0 | 28 |
| AUTO 210 | Auto Trans & Transaxles I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 7 | 0 | 13 |
| AUTO 210 | Auto Trans & Transaxles I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| AUTO 225 | Eng Performance I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 |
| AUTO 225 | Eng Performance I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| AUTO 225 | Eng Performance I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 7 | 0 | 8 | 0 | 0 | 0 | 0 | 25 |
| AUTO 225 | Eng Performance I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 |
| AUTO 225 | Eng Performance I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 10 |
| AUTO 225 | Eng Performance I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| AUTO 225 | Eng Performance I | In person | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| AUTO 225 | Eng Performance I | In person | 0 | 14 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 |
| AUTO 225 | Eng Performance I | In person | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| AUTO 225 | Eng Performance I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| AUTO 227 | Eng Performance II | In person | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| AUTO 227 | Eng Performance II | In person | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| AUTO 227 | Eng Performance II | In person | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| AUTO 227 | Eng Performance II | In person | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| AUTO 227 | Eng Performance II | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 5 | 0 | 17 |
| AUTO 227 | Eng Performance II | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| AUTO 227 | Eng Performance II | In person | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| AUTO 227 | Eng Performance II | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |

WNC Course Success Rates by Academic Year (fall, spring, and summer)

(Total students with C- and above, P, or S grades/total enrolled after removing audits, incompletes and missing grades. Must have at least a total of 10 students enrolled.)

| Division | Subject | Catalog No Title | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | Total_Enrolled |
|-----------------------|---------|-------------------------------|---------|---------|---------|---------|---------|----------------|
| Career & Technical Ed | AUTO | 115 Auto Elect I | 94.4 | 90.5 | 84.4 | 91.7 | 79.2 | 140 |
| Career & Technical Ed | AUTO | 117 Adv Auto Elect | 100.0 | 88.9 | 90.0 | 100.0 | 80.0 | 56 |
| Career & Technical Ed | AUTO | 130 Engine Reconditioning | 83.7 | 91.7 | 88.6 | 83.3 | 100.0 | 156 |
| Career & Technical Ed | AUTO | 145 Auto Brakes | 92.9 | 80.0 | 87.9 | 87.0 | 87.5 | 110 |
| Career & Technical Ed | AUTO | 155 Steering & Suspension | 92.0 | 87.5 | 94.4 | 81.5 | 100.0 | 129 |
| Career & Technical Ed | AUTO | 160 Auto Air Cond & Heating | 80.0 | 91.7 | 72.2 | 91.7 | 71.4 | 59 |
| Career & Technical Ed | AUTO | 210 Auto Trans & Transaxles I | 87.5 | 89.7 | 87.5 | 80.0 | 82.4 | 119 |
| Career & Technical Ed | AUTO | 225 Eng Performance I | 87.0 | 96.2 | 82.4 | 88.9 | 76.9 | 114 |
| Career & Technical Ed | AUTO | 227 Eng Performance II | 100.0 | 77.8 | 83.3 | 100.0 | 100.0 | 55 |

WNC Students Enrolled by Course and Academic Year (fall, spring, summer)

| Division | Subject | Catalog No | Title | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|-----------------------|---------|------------|---------------------------|---------|---------|---------|---------|---------|
| Career & Technical Ed | AUTO | 101 | Intro to General Mech | 130 | 68 | 78 | 72 | 41 |
| Career & Technical Ed | AUTO | 115 | Auto Elect I | 18 | 42 | 32 | 24 | 25 |
| Career & Technical Ed | AUTO | 117 | Adv Auto Elect | 15 | 9 | 10 | 12 | 10 |
| Career & Technical Ed | AUTO | 130 | Engine Reconditioning | 43 | 36 | 44 | 18 | 16 |
| Career & Technical Ed | AUTO | 145 | Auto Brakes | 29 | 10 | 33 | 23 | 17 |
| Career & Technical Ed | AUTO | 155 | Steering & Suspension | 25 | 41 | 18 | 27 | 19 |
| Career & Technical Ed | AUTO | 160 | Auto Air Cond & Heating | 10 | 12 | 18 | 12 | 7 |
| Career & Technical Ed | AUTO | 210 | Auto Trans & Transaxles I | 16 | 39 | 32 | 15 | 17 |
| Career & Technical Ed | AUTO | 225 | Eng Performance I | 23 | 26 | 34 | 18 | 13 |
| Career & Technical Ed | AUTO | 227 | Eng Performance II | 18 | 9 | 6 | 17 | 5 |

WNC Degrees and Certificates of Achievement by Fiscal Year

[illegible]

WNC Declared Majors Enrolled as of October 15 or March 15 by Semester

| Division | Degree | Declared Major | Fall 2013 | Spr 2014 | Fall 2014 | Spr 2015 | Fall 2015 | Spr 2016 | Fall 2016 | Spr 2017 | Fall 2017 |
|-----------------------|--------|------------------------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|
| Career & Technical Ed | AAS | Technology - Automotive Mech | 0 | 0 | 6 | 12 | 26 | 20 | 24 | 22 | 21 |

Reporting Elements Template
(Please type your responses in the space available)

Technology Program:

Computer Information Technology

1. Program Description

A. College and Program Mission: The college mission and program mission are presented side-by-side in a table to show how the college and program missions align. The program mission states the purpose of the program; names its primary functions, activities and stakeholders; Supports the college mission; and is distinctive.

College Mission

Western Nevada College inspires success in our community through opportunities that cultivate creativity, intellectual growth and technological excellence, in an environment that nurtures individual potential and respects differences.

Program Mission (*What is the mission of your program?*) *These can also be found on MyWNC*
The purpose of the Associate of Applied Science Technology Degree in Computer Information Technology is to provide graduates with up-to-date training in the management of information resources, including computer and networking operations, infrastructure and information security.

B. College and Program Goals: The College Strategic Goals and the program goals and related outcomes are presented side-by-side in a table to show how they align. Also indicate any linkage to ISLOs (Institutional Student Learning Outcomes) by indicating this alignment with the following shorthand, in parenthesis, next to the aligned program outcome (ISLO x , where x indicates the number of the ISLO).

College Goals

- Improve student success in program completion and graduation rates
- Ensure institutional excellence in teaching, programs and services
- Embrace our college's many communities and respond to their diverse needs.

Reporting Elements Template

(Please type your responses in the space available)

Program Goals and Outcomes *(What are the Goals and Outcomes of your program?)*

- Apply knowledge of computing and information technology appropriate to the discipline
- Analyze a problem, and identify and define the technology requirements appropriate to its solution
- Design, implement and evaluate a computer-based system, process, component, or program to meet desired needs
- Function effectively on teams to accomplish a common goal
- Understand professional, ethical, legal, security, and social issues and responsibilities
- Communicate effectively with a range of audiences
- Analyze the local and global impact of computing on individuals, organizations and society
- Recognize the need for, and an ability to engage in, continuing professional development
- Use and apply current technical concepts and practices in the core information technologies
- Effectively integrate IT-based solutions into the user environment
- Understand best practices and standards and their application

C. Short Description: Include the following information and append supporting documents as appropriate:

i. Unique characteristics

The program offers students and opportunity to become certified in some of the best known IT industry standard certification programs including Comp-TIA A+, Security+, Linux+; Cisco CCENT and CCNA; Microsoft MCP certifications, and Project Management Institute PMA.

ii. Concerns or trends affecting the program

Enrollment is down currently in the program. This may be due to shifting perceptions by incoming students that the program material is difficult and unreachable.

iii. Significant changes or needs in the next five years

Reporting Elements Template

(Please type your responses in the space available)

WNC is in the process of building and qualifying a Cyber Security degree within the program. Information and data security are at the forefront of needs for every business that uses technology resources.

Matrix Spreadsheet – Separate Document

D. Program SLO/Required Course Matrix: Attach to the report this matrix which maps the student learning outcomes to required courses and shows the degree to which a course addresses an outcome. The matrix should reflect required courses and SLOs for the 2017-2018 catalog. When changes are made to the curriculum, Program SLO/Course Matrices are to be updated and submitted to Institutional Research for publication on the college website.

E. Degrees and/or Certificates Offered: List degrees or certificates that are being evaluated for the purposes of this program review.

AAS Technology – Computer Information Technology

CoA Technology – Computer Information Technology Networking Technician

CoA Technology – Computer Information Technology System Admin Technician

F. Niches Served: Describe any niches in the community the program serves, including other academic programs served by program core courses.

Information Technology is not a niche. According to the report In Demand Occupations produced by the Nevada Office of Workforce Innovation, “There are occupations that appear in the Information technology (IT) sector that show up in every of the other seven industry sectors, such as software development. Thus, being trained for the IT sector would have a significant return on investment since individuals can find jobs in a host of industries regionally, nationally, and even internationally.”

2. Quality of Program

A. Evidence of Effectiveness

i. Course Scheduling/Enrollment History Report: *Institutional Research* provides this spreadsheet, which includes course scheduling history and enrollment figures for the most recent four-year period. This report is used to satisfy item #5 of the Curriculum Review Report portion of the program review report.

ii. Summary Data Sheet: *Institutional Research* provides the Summary Data Sheet, a document that provides information on the headcount of students who have declared majors in the program, number of degrees and certificates granted, successful course completion data, student credit hours data, FTE, FTE faculty, workload ratios, and other information that provides a basis for demonstrating program efficiency and effectiveness.

iii. Systematic Assessment: (*This is what is generated from your yearly JOT Form submissions*)

<https://form.jotform.us/71906990133156>

Reporting Elements Template

(Please type your responses in the space available)

Instructional programs must include evidence that they systematically assess program outcomes and student learning outcomes and that data from assessments are used to make improvements to programs. The final program review report should include the Five-Year Assessment Plan. The report should also indicate the steps taken to make the student learning outcomes public and available to students.

B. Evidence of Satisfaction: Instructional programs may include additional hard data regarding student satisfaction with courses and programs, employer satisfaction studies, etc., as indicators of effectiveness of the program. Results from the Noel-Levitz Student Satisfaction Inventory (2007 and 2009) and the Community College Survey of Student Engagement (2008 and 2012) can be broken out by declared major and are available upon request. Summarized results from Revised and approved May 19, 2017 student course evaluations are another source of satisfaction evidence, and instructors can add one question of their choice to the evaluations. The chair of the PRT should consult with Institutional Research regarding the availability of data.

C. Certifications/Licenses: Instructional programs need to explain if there are special certifications or accreditations available to the program and the status of the program relative to these certifications or accreditations.

D. Enrollment Trends: Instructional programs should discuss general student demographics and enrollment trends outlined by the following questions:

a. What student demographic and enrollment trends are most notable?

Enrollment is very cyclical within the program. Currently it is becoming difficult to fill upper level classes. A discussion with Greg Ellis, CT dept. chair at TMCC shows that this is a problem across the area. TMCC has not offered their upper level Cisco courses in several semesters.

b. What groups constitute the program's main demographic?

The primary student is non-traditional working adults. Recently there have been more students of a more traditional age coming to the program. Classes have been scheduled to try to take advantage of this population.

c. What efforts have been made by the program to recruit students?

Faculty regularly is asked to demonstrate and provide insight regarding the program to visiting students and administrators as well as members of local and state government.

d. What initiatives have been undertaken to increase FTE?

The Cisco program has adopted the use of Netlab. This allows 24/7 online student access to the needed labs for students to complete the Cisco program. This has allowed the courses to be

Reporting Elements Template

(Please type your responses in the space available)

taught in an online/onsite hybrid mode. Changes in teaching methods by using the TestOut curriculum has allowed the classes to be offered online.

e. What initiatives have been undertaken to improve student retention?

Classes have been migrated to an online platform when appropriate to allow for student flexibility in scheduling. Students are also made aware of the benefits of attaining the higher level certifications.

(Separate Word Document)

E. Need for the Program: Explain the need and basis for determining the need for the program. Objective data, such as alumni studies, employer perceptions, data on transfer or transfer potential, local employment opportunities, and studies commissioned by W NC or NSHE, should be included when possible.

F. Curriculum Review Report: Attach to this report the Curriculum Review Report and the Curriculum Committee Program Evaluation (the committee's response to the Curriculum Review Report).

G. Findings and Recommendations: Present the PRT's commendations and recommendations that are the result of the self-study process. If the review recommends any changes to the program, a detailed description of the specific plan of action to implement the recommendations and a timeline for implementation of the plan are required.

Associate of Applied Science, Computer Information Technology Program

| Student Learning Outcomes Matrix | | | | | | | | | |
|----------------------------------|--|--|--|--|--|--|--|--|--|
|----------------------------------|--|--|--|--|--|--|--|--|--|

Computer Information Technology AAS Degree

| Outcomes | |
|----------|--|
| 1 | Apply knowledge of computing and information technology appropriate to the discipline |
| 2 | Analyze a problem, and identify and define the technology requirements appropriate to its solution |
| 3 | Design, implement and evaluate a computer-based system, process, component, or program to meet desired needs |
| 4 | Function effectively on teams to accomplish a common goal |
| 5 | Understand professional, ethical, legal, security, and social issues and responsibilities |
| 6 | Communicate effectively with a range of audiences |
| 7 | Analyze the local and global impact of computing on individuals, organizations and society |
| 8 | Recognize the need for, and an ability to engage in, continuing professional development |
| 9 | Use and apply current technical concepts and practices in the core information technologies |
| 10 | Effectively integrate IT-based solutions into the user environment |
| 11 | Understand best practices and standards and their application |
| | |
| | |

[illegible]

WNC Total Enrollment in Classes by Location, Instruction Mode, Day of the Week and Time of Day

| TOTAL | | | | | | | | | | | | | | | | | | | | | | |
|----------|-------------------------------|-----------------|-------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|----------|
| CLASS | CLASS TITLE | MODE | DAY | Fall 2011 | Spr 2012 | Sum 2012 | Fall 2012 | Spr 2013 | Sum 2013 | Fall 2013 | Spr 2014 | Sum 2014 | Fall 2014 | Spr 2015 | Sum 2015 | Fall 2015 | Spr 2016 | Sum 2016 | Fall 2016 | Spr 2017 | Sum 2017 | ENROLLED |
| CIT 114 | IT Essentials | In person | TTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 14 | 0 | 32 |
| CIT 114 | IT Essentials | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 23 | 17 | 0 | 0 | 0 | 0 | 61 |
| CIT 128 | Intro to Software Development | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 24 |
| CIT 128 | Intro to Software Development | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 25 |
| CIT 129 | Intro to Programming | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 18 |
| CIT 129 | Intro to Programming | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 13 |
| CIT 130 | Beginning Java | In person | T | 21 | 18 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 72 |
| CIT 133 | Beginning C++ | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| CIT 133 | Beginning C++ | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 5 | 0 | 0 | 0 | 0 | 19 |
| CIT 161 | Essentials Info Security | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| CIT 161 | Essentials Info Security | | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| CIT 161 | Essentials Info Security | Lecture Capture | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| CIT 161 | Essentials Info Security | Online | | 32 | 0 | 24 | 33 | 0 | 16 | 33 | 0 | 0 | 45 | 22 | 0 | 24 | 15 | 6 | 22 | 21 | 0 | 293 |
| CIT 173 | Linux Install & Config | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| CIT 173 | Linux Install & Config | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| CIT 173 | Linux Install & Config | In person | TH | 15 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 |
| CIT 174 | Linux System Admin | In person | TH | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| CIT 180 | Database Concepts and Sql | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| CIT 211 | Microsoft Networking I | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| CIT 211 | Microsoft Networking I | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| CIT 211 | Microsoft Networking I | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 8 |
| CIT 211 | Microsoft Networking I | In person | | 0 | 0 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 |
| CIT 211 | Microsoft Networking I | Online | | 0 | 33 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 30 | 0 | 14 | 3 | 12 | 0 | 0 | 0 | 122 |
| CIT 212 | Microsoft Networking II | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| CIT 212 | Microsoft Networking II | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| CIT 212 | Microsoft Networking II | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 7 |
| CIT 212 | Microsoft Networking II | Lecture Capture | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| CIT 212 | Microsoft Networking II | In person | | 0 | 0 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 |
| CIT 212 | Microsoft Networking II | Online | | 0 | 34 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 4 | 0 | 10 | 0 | 69 |
| CIT 213 | Microsoft Networking III | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 5 |
| CIT 213 | Microsoft Networking III | Online | | 20 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44 |
| CIT 214 | Microsoft Networking IV | In person | | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| CIT 214 | Microsoft Networking IV | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| CIT 214 | Microsoft Networking IV | Online | | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| CIT 263 | It Project Management | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| CIT 263 | It Project Management | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
| CIT 263 | It Project Management | In person | MW | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| CIT 263 | It Project Management | In person | T | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| CIT 263 | It Project Management | In person | TTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 19 | 0 | 11 | 12 | 0 | 53 |
| CSCO 120 | Ccna Internetworking Fund | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| CSCO 120 | Ccna Internetworking Fund | In person | MW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 7 | 0 | 6 | 0 | 0 | 29 |
| CSCO 120 | Ccna Internetworking Fund | In person | MW | 0 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| CSCO 120 | Ccna Internetworking Fund | In person | TTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 19 |
| CSCO 120 | Ccna Internetworking Fund | In person | TTH | 23 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 |
| CSCO 120 | Ccna Internetworking Fund | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| CSCO 120 | Ccna Internetworking Fund | Online | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 5 |
| CSCO 121 | Ccna Routing Protocols | In person | MW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 6 | 0 | 4 | 0 | 0 | 26 |
| CSCO 121 | Ccna Routing Protocols | In person | MW | 0 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| CSCO 121 | Ccna Routing Protocols | In person | TTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 14 |
| CSCO 121 | Ccna Routing Protocols | In person | TTH | 23 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 |
| CSCO 121 | Ccna Routing Protocols | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 |
| CSCO 121 | Ccna Routing Protocols | Lecture Capture | MW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| CSCO 121 | Ccna Routing Protocols | Online | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| CSCO 130 | Fundamental Wireless Lans | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 3 | 0 | 7 |
| CSCO 130 | Fundamental Wireless Lans | In person | M | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| CSCO 130 | Fundamental Wireless Lans | In person | TH | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| CSCO 130 | Fundamental Wireless Lans | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 8 |
| CSCO 130 | Fundamental Wireless Lans | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| CSCO 220 | Ccna Lan Switch Wireless | In person | MW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 9 |
| CSCO 220 | Ccna Lan Switch Wireless | In person | MW | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| CSCO 220 | Ccna Lan Switch Wireless | In person | TTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 24 |
| CSCO 220 | Ccna Lan Switch Wireless | In person | TTH | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| CSCO 220 | Ccna Lan Switch Wireless | Lecture Capture | TTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| CSCO 220 | Ccna Lan Switch Wireless | Lecture Capture | TTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| CSCO 220 | Ccna Lan Switch Wireless | Online | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| CSCO 221 | Ccna Wan Fundamentals | In person | MW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 9 |
| CSCO 221 | Ccna Wan Fundamentals | In person | MW | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | |
|----------|--------------------------------|-----------------|-----|----|----|---|----|----|---|----|----|----|----|----|----|----|----|----|----|----|-----|
| CSCO 230 | Fndmntl Network Security | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| GRC 183 | Design With Photoshop | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| GRC 183 | Electronic Imaging | In person | MW | 23 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| GRC 183 | Electronic Imaging | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 21 | 0 | 12 | 18 | 0 | 0 | 18 | 0 | 0 | 0 | 88 |
| GRC 183 | Design With Photoshop | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 0 | 11 |
| GRC 183 | Electronic Imaging | In person | TTH | 0 | 0 | 0 | 21 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
| GRC 183 | Electronic Imaging | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 6 | 0 | 0 | 0 | 0 | 10 |
| GRC 183 | Electronic Imaging | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| GRC 183 | Electronic Imaging | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| GRC 183 | Design With Photoshop | Lecture Capture | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| GRC 183 | Electronic Imaging | Online | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 12 |
| GRC 183 | Design With Photoshop | Online | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 7 | 0 | 18 |
| IS 101 | Intro to Information Sys | In person | M | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 20 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 64 |
| IS 101 | Intro to Information Sys | In person | MW | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| IS 101 | Intro to Information Sys | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| IS 101 | Intro to Information Sys | In person | T | 0 | 0 | 0 | 21 | 20 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 |
| IS 101 | Intro to Information Sys | In person | T | 21 | 0 | 0 | 0 | 20 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 61 |
| IS 101 | Intro to Information Sys | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 13 | 0 | 14 | 0 | 0 | 38 |
| IS 101 | Intro to Information Sys | In person | TH | 22 | 0 | 0 | 23 | 20 | 0 | 0 | 19 | 0 | 20 | 19 | 0 | 17 | 20 | 0 | 15 | 12 | 187 |
| IS 101 | Intro to Information Sys | In person | TTH | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| IS 101 | Intro to Information Sys | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 16 | 16 | 0 | 18 | 19 | 0 | 19 | 15 | 123 |
| IS 101 | Intro to Information Sys | In person | W | 0 | 24 | 0 | 22 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 |
| IS 101 | Intro to Information Sys | In person | M | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| IS 101 | Intro to Information Sys | In person | MW | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| IS 101 | Intro to Information Sys | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| IS 101 | Intro to Information Sys | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 6 |
| IS 101 | Intro to Information Sys | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| IS 101 | Intro to Information Sys | In person | TTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 17 |
| IS 101 | Intro to Information Sys | In person | TTH | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| IS 101 | Intro to Information Sys | In person | TTH | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| IS 101 | Intro to Information Sys | In person | TTH | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| IS 101 | Intro to Information Sys | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 11 |
| IS 101 | Intro to Information Sys | Online | | 23 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 61 | 50 | 30 | 30 | 29 | 25 | 51 | 35 | 0 | 362 |
| IS 201 | Computer Applications | In person | M | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| IS 201 | Computer Applications | In person | M | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| IS 201 | Computer Applications | In person | MW | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| IS 201 | Computer Applications | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| IS 201 | Computer Applications | In person | T | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| IS 201 | Computer Applications | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 |
| IS 201 | Computer Applications | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 15 | 0 | 19 | 10 | 0 | 16 | 6 | 82 |
| IS 201 | Computer Applications | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| IS 201 | Computer Applications | In person | W | 0 | 23 | 0 | 21 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 |
| IS 201 | Computer Applications | In person | T | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| IS 201 | Computer Applications | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| IS 201 | Computer Applications | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| IS 201 | Computer Applications | In person | TTH | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| IS 201 | Computer Applications | In person | TTH | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| IS 201 | Computer Applications | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| IS 201 | Computer Applications | Online | | 23 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 29 | 20 | 20 | 25 | 10 | 194 |
| INF 100 | Intro to Informatics I - Basic | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| INF 100 | Intro to Informatics I - Basic | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 13 |
| INF 100 | Intro to Informatics I - Basic | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 15 | 0 | 0 | 0 | 21 |

WNC Course Success Rates by Academic Year (fall, spring, and summer)

(Total students with C- and above, P, or S grades/total enrolled after removing audits, incompletes and missing grades. Must have at least a total of 10 students enrolled.)

| Division | Subject | Catalog No | Title | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | Total_Enrolled |
|-----------------------|---------|------------|--------------------------------|---------|---------|---------|---------|---------|----------------|
| Career & Technical Ed | CIT | 114 | IT Essentials | | | 86.4 | 79.5 | 81.3 | 93 |
| Career & Technical Ed | CIT | 128 | Intro to Software Development | | | | 95.8 | 88.0 | 49 |
| Career & Technical Ed | CIT | 129 | Intro to Programming | | | | 77.8 | 92.3 | 31 |
| Career & Technical Ed | CIT | 130 | Beginning Java | | 92.3 | 100.0 | | 100.0 | 33 |
| Career & Technical Ed | CIT | 133 | Beginning C++ | | | | 83.3 | 100.0 | 20 |
| Career & Technical Ed | CIT | 161 | Essentials Info Security | 65.3 | 80.6 | 76.1 | 73.5 | 75.6 | 246 |
| Career & Technical Ed | CIT | 173 | Linux Install & Config | 65.0 | 90.0 | 100.0 | | | 37 |
| Career & Technical Ed | CIT | 211 | Microsoft Networking I | 78.6 | 57.1 | 83.3 | 71.8 | 81.8 | 156 |
| Career & Technical Ed | CIT | 212 | Microsoft Networking II | 81.1 | 81.8 | 88.9 | 90.0 | 90.9 | 87 |
| Career & Technical Ed | CIT | 213 | Microsoft Networking III | 87.5 | 50.0 | 75.0 | 100.0 | | 29 |
| Career & Technical Ed | CIT | 214 | Microsoft Networking IV | 78.6 | 100.0 | 66.7 | | | 21 |
| Career & Technical Ed | CIT | 263 | It Project Management | 84.0 | 76.2 | 64.7 | 69.0 | 65.2 | 115 |
| Career & Technical Ed | INF | 100 | Intro to Informatics I - Basic | | | 100.0 | 76.2 | 84.6 | 44 |
| Career & Technical Ed | CSCO | 120 | Ccna Internetworking Fund | 96.0 | 88.9 | 73.7 | 81.8 | 50.0 | 120 |
| Career & Technical Ed | CSCO | 121 | Ccna Routing Protocols | 79.2 | 76.5 | 66.7 | 77.8 | 60.0 | 112 |
| Career & Technical Ed | CSCO | 130 | Fundamental Wireless Lans | 100.0 | 95.2 | | 72.7 | 100.0 | 56 |
| Career & Technical Ed | CSCO | 220 | Ccna Lan Switch Wireless | 100.0 | 92.3 | 93.3 | 77.8 | 83.3 | 66 |
| Career & Technical Ed | CSCO | 221 | Ccna Wan Fundamentals | 100.0 | 92.3 | 85.7 | 64.7 | 100.0 | 64 |
| Career & Technical Ed | CSCO | 230 | Fndmntls Network Security | | | 62.5 | | 71.4 | 15 |
| Career & Technical Ed | GRC | 183 | Electronic Imaging | 97.3 | 81.1 | 89.1 | 88.4 | 73.3 | 193 |
| Career & Technical Ed | IS | 101 | Intro to Information Sys | 78.8 | 81.3 | 71.6 | 79.6 | 71.4 | 948 |
| Career & Technical Ed | IS | 201 | Computer Applications | 86.8 | 90.3 | 78.8 | 72.0 | 80.4 | 397 |

WNC Students Enrolled by Course and Academic Year (fall, spring, summer)

| Division | Subject | Catalog No | Title | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|-----------------------|---------|------------|--------------------------------|---------|---------|---------|---------|---------|
| Career & Technical Ed | CIT | 114 | IT Essentials | 0 | 0 | 22 | 40 | 32 |
| Career & Technical Ed | CIT | 128 | Intro to Software Development | 0 | 0 | 0 | 24 | 25 |
| Career & Technical Ed | CIT | 129 | Intro to Programming | 0 | 0 | 0 | 18 | 13 |
| Career & Technical Ed | CIT | 130 | Beginning Java | 0 | 13 | 9 | 0 | 11 |
| Career & Technical Ed | CIT | 133 | Beginning C++ | 0 | 0 | 0 | 19 | 2 |
| Career & Technical Ed | CIT | 161 | Essentials Info Security | 49 | 36 | 67 | 49 | 46 |
| Career & Technical Ed | CIT | 173 | Linux Install & Config | 20 | 10 | 8 | 0 | 0 |
| Career & Technical Ed | CIT | 180 | Database Concepts and Sql | 0 | 0 | 0 | 0 | 1 |
| Career & Technical Ed | CIT | 211 | Microsoft Networking I | 56 | 14 | 36 | 39 | 12 |
| Career & Technical Ed | CIT | 212 | Microsoft Networking II | 37 | 11 | 18 | 11 | 11 |
| Career & Technical Ed | CIT | 213 | Microsoft Networking III | 16 | 2 | 8 | 3 | 0 |
| Career & Technical Ed | CIT | 214 | Microsoft Networking IV | 14 | 1 | 6 | 0 | 0 |
| Career & Technical Ed | CIT | 263 | It Project Management | 25 | 21 | 17 | 30 | 23 |
| Career & Technical Ed | CSCO | 120 | Ccna Internetworking Fund | 25 | 19 | 39 | 34 | 7 |
| Career & Technical Ed | CSCO | 121 | Ccna Routing Protocols | 24 | 17 | 40 | 27 | 5 |
| Career & Technical Ed | CSCO | 130 | Fundamental Wireless Lans | 20 | 21 | 0 | 11 | 4 |
| Career & Technical Ed | CSCO | 220 | Ccna Lan Switch Wireless | 14 | 13 | 15 | 18 | 6 |
| Career & Technical Ed | CSCO | 221 | Ccna Wan Fundamentals | 14 | 13 | 14 | 17 | 6 |
| Career & Technical Ed | CSCO | 230 | Fndmntls Network Security | 0 | 0 | 8 | 0 | 7 |
| Career & Technical Ed | GRC | 183 | Electronic Imaging | 37 | 40 | 48 | 43 | 32 |
| Career & Technical Ed | IS | 101 | Intro to Information Sys | 161 | 162 | 260 | 199 | 178 |
| Career & Technical Ed | IS | 201 | Computer Applications | 92 | 72 | 85 | 98 | 57 |
| Career & Technical Ed | INF | 100 | Intro to Informatics I - Basic | 0 | 0 | 10 | 21 | 13 |

WNC Degrees and Certificates of Achievement by Fiscal Year

[illegible]

WNC Declared Majors Enrolled as of October 15 or March 15 by Semester

| Division | Degree | Declared Major | Fall 2013 | Spr 2014 | Fall 2014 | Spr 2015 | Fall 2015 | Spr 2016 | Fall 2016 | Spr 2017 | Fall 2017 |
|-----------------------|--------|-----------------------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|
| Career & Technical Ed | AAS | Technology - Comp Info Tech | 0 | 0 | 22 | 33 | 44 | 40 | 49 | 52 | 45 |

Reporting Elements

Technology Program: Construction

1. Program Description

A. College and Program Mission: The college mission and program mission are presented side-by-side in a table to show how the college and program missions align. The program mission states the purpose of the program; names its primary functions, activities and stakeholders; Supports the college mission; and is distinctive.

College Mission

Western Nevada College inspires success in our community through opportunities that cultivate creativity, intellectual growth and technological excellence, in an environment that nurtures individual potential and respects differences.

Program Mission (*What is the mission of your program?*) *These can also be found on MyWNC*
The mission of the AAS degree in Construction Management is to prepare students for entry level positions within the various construction industry disciplines, and to meet the goals of the Technology Division. It also serves as the gateway into the BAS degree in Construction Management.

B. College and Program Goals: The College Strategic Goals and the program goals and related outcomes are presented side-by-side in a table to show how they align. Also indicate any linkage to ISLOs (Institutional Student Learning Outcomes) by indicating this alignment with the following shorthand, in parenthesis, next to the aligned program outcome (ISLO x , where x indicates the number of the ISLO).

College Goals

- Improve student success in program completion and graduation rates
- Ensure institutional excellence in teaching, programs and services
- Embrace our college's many communities and respond to their diverse needs.

Reporting Elements

Program Goals and Outcomes (*What are the Goals and Outcomes of your program?*)

- Prepare students for entry level management positions in construction
- know the subject matter appropriate to the emphasis of the degree
- communicate effectively and appropriately, in oral and written form
- locate, evaluate and properly utilize the tools and resources appropriate to a technology professional
- acquire skills and perform tasks necessary for employment or career advancement
- an appreciation of the importance of social, ethical, legal and diversity issues
- an appreciation of the need and importance of lifelong learning

C. Short Description: Include the following information and append supporting documents as appropriate:

i. **Unique characteristics**

- It serves as the gateway into the only four year construction management program offered in Northern Nevada
- The majority of the courses are scheduled late in the day to accommodate non-traditional students that work full time
- It provides job placement to its graduates.
- Provides service opportunities to students both on and off campus

ii. **Concerns or trends affecting the program**

Concerns: Records indicate that there have been frequent turnovers in faculty and administrative leadership throughout the life of the program. Combined with the downturn in the construction industry starting in 2006, concerns have been generated about the sustainability of the program. Records indicate that scheduling semester courses varied from year to year and there was no guarantee that a student could progress through the program without delays or other obstacles that hindered their progress in a timely manner. Fortunately, all CTE programs (Career and Technical Education) have a new director whose prior assessment experience will help address these concerns.

Employment Trends: CTE program areas, such as the AAS Construction Management, serve a specific employer and occupational need in the region. As such, enrollment fluxuations are expected to be consistent with the regional economy. This factor creates the need to take steps to maintain enrollment and deliver the program as efficiently as possible.

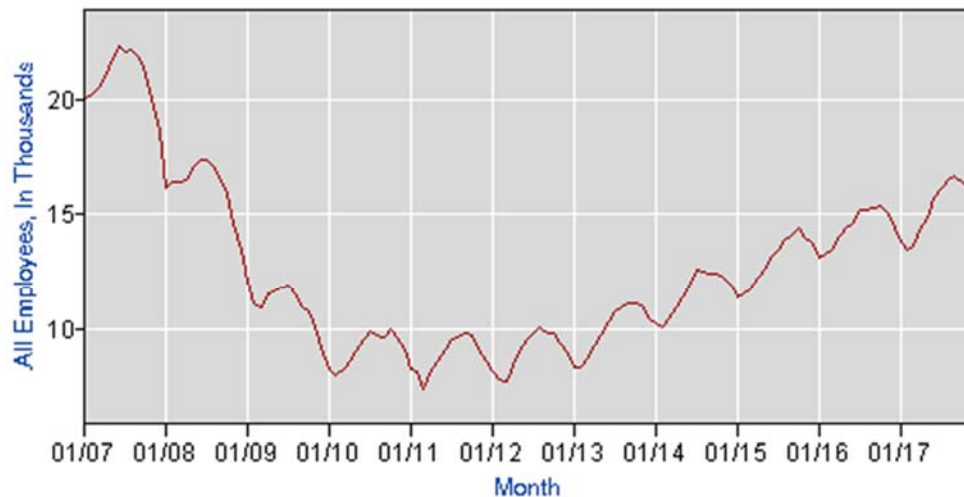
Reporting Elements

The chart below shows the State and Area Construction Employment trends over the past ten years. In 2006, the construction industry began a sharp decline and many construction companies were forced to release workers due to lack of contracts. Many workers were then retrained or worked in other industries. This generated a negative impact on enrollment and retention rates. The construction industry in Northern Nevada began a slow recovery in 2012, which accelerated in 2014 and continues upward. According to a study conducted by the Builders Alliance of Western Nevada (BAWN) there will be a potential shortage of competent construction workers in the future. This has proven itself in the last year or two with a boom in the Construction industry within our local area.

State and Area Employment, Hours, and Earnings: 2005 - 2017

Source: U.S. Bureau of Labor Statistics

| |
|---|
| Seasonally Adjusted |
| State: Nevada |
| Area: Statewide |
| Industry: Construction |
| Data Type: All Employees, In Thousands |



iii. Significant changes or needs in the next five years

- Increasing the number of relevant business and management courses required for the degree.
- The lack of relevant Marketing support in high profile locations.
- Eliminating the barriers that are hindering the success of the Construction Jump Start program.
- Providing competent adjunct instructors in courses that previously were filled by individuals filling voids in the schedule without the necessary knowledge or skill sets to cover the subject matter in the correct way.

Reporting Elements

- Student learning outcomes need to be expanded to include leadership and team building and management requirements associated with construction management.

Matrix Spreadsheet – Separate Document

D. Program SLO/Required Course Matrix: Attach to the report this matrix which maps the student learning outcomes to required courses and shows the degree to which a course addresses an outcome. The matrix should reflect required courses and SLOs for the 2017-2018 catalog. When changes are made to the curriculum, Program SLO/Course Matrices are to be updated and submitted to Institutional Research for publication on the college website.

E. Degrees and/or Certificates Offered: List degrees or certificates that are being evaluated for the purposes of this program review.

- Associates of Applied Science in Technology – Construction Management
- 30 hour OSHA Safety card

F. Niches Served: Describe any niches in the community the program serves, including other academic programs served by program core courses.

- Community and campus service projects
- Play set design and construction for the Western Nevada Theatre Company
- Active involvement in area High School CTE programs
- Engagement with professional construction organizations

2. Quality of Program

A. Evidence of Effectiveness

i. Course Scheduling/Enrollment History Report: *Institutional Research* provides this spreadsheet, which includes course scheduling history and enrollment figures for the most recent four-year period. This report is used to satisfy item #5 of the Curriculum Review Report portion of the program review report. (Attached)

ii. Summary Data Sheet: *Institutional Research* provides the Summary Data Sheet, a document that provides information on the headcount of students who have declared majors in the program, number of degrees and certificates granted, successful course completion data, student credit hours data, FTE, FTE faculty, workload ratios, and other information that provides a basis for demonstrating program efficiency and effectiveness. (Attached)

iii. Systematic Assessment: (*This is what is generated from your yearly JOT Form submissions*)

<https://form.jotform.us/71906990133156>

Reporting Elements

Instructional programs must include evidence that they systematically assess program outcomes and student learning outcomes and that data from assessments are used to make improvements to programs. The final program review report should include the Five-Year Assessment Plan. The report should also indicate the steps taken to make the student learning outcomes public and available to students.

B. Evidence of Satisfaction: Instructional programs may include additional hard data regarding student satisfaction with courses and programs, employer satisfaction studies, etc., as indicators of effectiveness of the program. Results from the Noel-Levitz Student Satisfaction Inventory (2007 and 2009) and the Community College Survey of Student Engagement (2008 and 2012) can be broken out by declared major and are available upon request. Summarized results from Revised and approved May 19, 2017 student course evaluations are another source of satisfaction evidence, and instructors can add one question of their choice to the evaluations. The chair of the PRT should consult with Institutional Research regarding the availability of data.

C. Certifications/Licenses: Instructional programs need to explain if there are special certifications or accreditations available to the program and the status of the program relative to these certifications or accreditations.

- OSHA 30 Hour Safety Card

D. Enrollment Trends: Instructional programs should discuss general student demographics and enrollment trends outlined by the following questions:

a. What student demographic and enrollment trends are most notable?

Attached

Course Completion Rates 2010-2014. According to the data provided by Institutional Research in the years 2011-2012, 2012-2013 female enrollment increased by 11% and increased another 16% between years 2012-2013, 2013-2014.

b. What groups constitute the program's main demographic?

Attached

Course Completion Rates 2010-2014. According to the data white students make up 71% of the program enrollment with 85-90% total enrollment being male.

c. What efforts have been made by the program to recruit students?

The following procedures have been implemented starting fall 2014:

- Established an active construction industry advisory board that provides guidance and internship opportunities
- Conducted community service projects that were promoted in local news papers
- Developed a construction academy for area high school students interested in construction careers using the NCCER process
- Developed a structured course schedule that is constant and does not conflict with other required courses
- Established relationships with local workforce development organizations

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- Participate in area career fairs
- Engage construction industry organizations and participate in their workforce development opportunities
- Established relationships with other two year colleges through strong articulation agreements

d. What initiatives have been undertaken to increase FTE?

The program is currently developing online courses in both the two year and four year programs for student convenience. The majority of courses are scheduled late in the afternoon or evening to allow students working full time to participate. Most courses are being offered on CANVAS. Adjunct instructors must hold specific qualifications and experience before being allowed to instruct courses and office hours are required to provide struggling students an opportunity to address their concerns or problems with the course.

The initiatives described above should generate more FTE in the future. The trend to increased enrollment coincides with industry demand. According to the Bureau of Labor Statistics the state of Nevada is currently experiencing a rise in demand for competent and qualified construction workers. According to past data, enrollment increases with an improved economy.

e. What initiatives have been undertaken to improve student retention?

- Established a set course schedule
- Established a direct link to internship opportunities through the program's advisory board
- Provide competent and qualified instructors
- Provide updated technology that is currently used in the industry
- Introduced project based learning into all curriculum

The initiatives listed above should improve student retention in the AAS- Construction Tech. program. According to the enrollment data provided by Institutional Research there were semesters where only a few required courses were offered. This extends the time it takes to complete the degree plan thus creating a loss of interest. The added convenience of having internship opportunities in house removes barriers that are present when applying for work off the street. In the past adjunct positions were filled with anyone interested in helping even if their qualifications did not match the content of the course which generates a lack of interest in students. Finally, with the introduction of project based learning the students get to experience real world applications and processes that take the lessons learned through lecture and apply them to real world scenarios.

(Separate Word Document)

E. Need for the Program: Explain the need and basis for determining the need for the program. Objective data, such as alumni studies, employer perceptions, data on transfer or transfer potential, local employment opportunities, and studies commissioned by WNC or NSHE, should be included when possible.

According to the Bureau of Labor Statistics Data (graphic pg. 3) the demand for construction workers in Northern Nevada has been slowly increasing each year since January, 2012. The AAS Degree here at WNC provides the necessary qualifications to satisfy the base or fundamental

Reporting Elements

criteria for any entry level construction management position across the nation. Once the curriculum is completely developed online it will fill an additional need for those that currently work in the construction industry but live in rural areas of the state.

The AAS degree serves as the gateway into the BAS. Currently there are only two four year programs in construction management offered in the state. Here at WNC and the other being UNLV. With the increased demand from the industry the need for this particular program increases with every building permit awarded for new construction projects. The program receives requests from the industry for interns every week. Fortunately at the time of this report the majority of the students enrolled in the program are working and receiving on-the-job training from our industry partners.

The detailed analysis of the data indicates the primary areas for improvement are increasing course enrollment and efficiency of delivery (scheduling). Several initiatives towards those goals have been explored since the new program instructor started in fall 2014. Some efforts have not launched and it will be one to three years before the AAS- Construction Tech. program can expect to see an impact. Efforts include:

1. BTECH was designed to be a continuation of the AAS Construction Management program. Efforts made to increase enrollment and completion at the Associate level should cultivate growth in the Bachelors program. For the Fall 2015 semester, a Construction Management Academy and concentrated K-12 recruiting is underway.
2. Agreements with TMCC for a 2+2 program with AAS graduates are being developed
3. A partnership with UNLV is being explored to accommodate some of the needs for both programs.
4. Credit for Prior Learning is being considered with CLEP testing opportunities.
5. Experiential Credit up to 15 credits with verifiable related work history.
6. Outreach to construction employers for internships, placements and recruitment of incumbent workers.
7. Conversion of instructor led courses to on-line delivery should expand the pool of potential students by reaching working adults and students in rural areas.
8. Construction focused marketing efforts which include local career fairs, industry events, and high school campus visits.

F. Curriculum Review Report: Attach to this report the Curriculum Review Report and the Curriculum Committee Program Evaluation (the committee's response to the Curriculum Review Report).

G. Findings and Recommendations: Present the PRT's commendations and recommendations that are the result of the self-study process. If the review recommends any changes to the program, a detailed description of the specific plan of action to implement the recommendations and a timeline for implementation of the plan are required.

| Associate of Applied Science, Construction Technology Program | | | | | | | | |
|---|--|----------|---|---|---|---|---|---|
| Student Learning Outcomes Matrix | | | | | | | | |
| Construction Technology AAS Degree | | | | | | | | |
| Outcomes* | | | | | | | | |
| 1 | Identify, describe, and apply information, theories, methodologies and approaches from the sciences, social sciences, and humanities/arts. | | | | | | | |
| 2 | Write effective projects, papers, and reports. | | | | | | | |
| 3 | Present accurate calculations and symbolic operations, and explain how such calculations and operations are used in either the specific field of study or in interpreting information in other fields. | | | | | | | |
| 4 | Locate, evaluate, and appropriately use information from multiple resources to complete projects, activities, and papers. | | | | | | | |
| 5 | Describe diverse historical and/or contemporary positions on selected democratic values or practices. | | | | | | | |
| 6 | Integrate knowledge and skills from the study of sciences, mathematics, social sciences, and the humanities/arts to think critically about and develop solutions to contemporary and/or enduring problems. | | | | | | | |
| 7 | Identify, describe, and apply information in the discipline or career area of their choice sufficient for further study and/ or demonstrate competencies required to succeed in the workplace. | | | | | | | |
| Required Courses | | Outcomes | | | | | | |
| Course # | Name | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| CADD 100 | Computer Aided Drafting | X | | X | | | | X |
| CEM 100 | Fund. Of Cons. Management | X | | | X | | | X |
| CONS 111 | Intro to Building Codes | | | | X | | | X |
| CONS 108 | Construction Methods & Materials I | X | | | X | | | X |
| CONS 109 | Construction Methods & Materials II | X | | | X | | | X |
| CONS 118 | Construction Contract Documents | X | X | | | | X | X |
| CONS 120 | Blueprint Reading and Specs | X | | X | X | | X | |
| CONS 121 | Principles of Construction Estimating | X | X | | | | | X |
| CONS 205 | Construction Site Safety | X | X | | X | | | X |
| CONS 281 | Construction Planning & Scheduling | X | X | | X | | X | X |
| CONS 290 | Internship in Construction | X | X | | | | | X |
| SUR 119 | Construction Site Safety | X | X | | X | | | X |

WNC Total Enrollment in Classes by Location, Instruction Mode, Day of the Week and Time of Day

| GRAND TOTAL | | | | | | | | | | | | | | | | | | | | | | |
|-------------|-------------------------------|-----------|--------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|----------|
| CLASS | CLASS TITLE | MODE | DAY | Fall 2011 | Spr 2012 | Sum 2012 | Fall 2012 | Spr 2013 | Sum 2013 | Fall 2013 | Spr 2014 | Sum 2014 | Fall 2014 | Spr 2015 | Sum 2015 | Fall 2015 | Spr 2016 | Sum 2016 | Fall 2016 | Spr 2017 | Sum 2017 | ENROLLED |
| CEM 100 | Fundamentals Construction Mgt | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 4 |
| CEM 100 | Fundamentals Construction Mgt | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 |
| CEM 100 | Fundamentals Construction Mgt | In person | MTWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 |
| CEM 100 | Fundamentals Construction Mgt | In person | MTWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| CEM 100 | Fundamentals Construction Mgt | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 6 |
| CEM 100 | Fundamentals Construction Mgt | Online | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 15 |
| CADD 100 | Intro to Comp Aid Dft | In person | TH | 0 | 0 | 0 | 21 | 17 | 0 | 17 | 18 | 0 | 16 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 109 |
| CADD 100 | Intro to Comp Aid Dft | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 18 |
| CADD 100 | Intro to Comp Aid Dft | In person | M | 17 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| CONS 108 | Cons Materials & Methods | In person | M | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| CONS 108 | Cons Materials & Methods | In person | MTWTHF | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| CONS 108 | Cons Materials & Methods I | In person | MTWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 |
| CONS 108 | Cons Materials & Methods | In person | MTWTHF | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| CONS 108 | Cons Materials & Methods I | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| CONS 108 | Cons Materials & Methods | In person | TTH | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| CONS 108 | Cons Materials & Methods I | In person | MTWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 8 |
| CONS 109 | Cons Materials & Methods II | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 |
| CONS 109 | Cons Materials & Methods II | In person | TTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 13 |
| CONS 109 | Cons Materials & Methods II | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 6 |
| CONS 111 | Commercial Building Codes | In person | MTWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 0 | 7 |
| CONS 111 | Commercial Building Codes | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 |
| CONS 111 | Commercial Building Codes | Online | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 8 |
| CONS 118 | Cons Contract Documents | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 5 |
| CONS 118 | Cons Contract Documents | In person | MTWTHF | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| CONS 118 | Cons Contract Documents | In person | MWF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 |
| CONS 118 | Cons Contract Documents | In person | T | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| CONS 118 | Cons Contract Documents | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| CONS 118 | Cons Contract Documents | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| CONS 118 | Cons Contract Documents | In person | | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| CONS 118 | Cons Contract Documents | Online | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 5 | 0 | 0 | 4 | 7 | 0 | 19 |
| CONS 120 | Blueprint Read/Spec | In person | MTWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 0 | 6 |

| | | | | | | | | | | | | | | | | | | | | | | |
|----------|---------------------------|-----------------|--------|----|---|---|---|---|---|---|---|---|---|----|---|---|---|---|---|---|---|----|
| CONS 120 | Blueprint Read/Spec | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 |
| CONS 120 | Blueprint Read/Spec | In person | T | 0 | 0 | 0 | 0 | 7 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| CONS 120 | Blueprint Read/Spec | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| CONS 120 | Blueprint Read/Spec | In person | W | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| CONS 120 | Blueprint Read/Spec | In person | | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| CONS 120 | Blueprint Read/Spec | Online | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | |
| CONS 121 | Principle Cons Estimating | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 5 | |
| CONS 121 | Principle Cons Estimating | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| CONS 121 | Principle Cons Estimating | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| CONS 121 | Principle Cons Estimating | In person | T | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| CONS 121 | Principle Cons Estimating | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| CONS 121 | Principle Cons Estimating | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 8 |
| CONS 121 | Principle Cons Estimating | In person | | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| CONS 205 | Construction Site Safety | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | |
| CONS 205 | Construction Site Safety | In person | FS | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| CONS 205 | Construction Site Safety | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| CONS 205 | Construction Site Safety | In person | MTWTHF | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| CONS 205 | Construction Site Safety | In person | MTWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | |
| CONS 205 | Construction Site Safety | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| CONS 205 | Construction Site Safety | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| CONS 205 | Construction Site Safety | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| CONS 205 | Construction Site Safety | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 |
| CONS 205 | Construction Site Safety | Lecture Capture | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | |
| CONS 205 | Construction Site Safety | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| CONS 281 | Cons Plan Schedule Contrl | In person | T | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| CONS 281 | Cons Plan Schedule Contrl | In person | TH | 0 | 8 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| CONS 281 | Cons Plan Schedule Contrl | In person | TTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| CONS 281 | Cons Plan Schedule Contrl | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | |
| CONS 281 | Cons Plan Schedule Contrl | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| CONS 290 | Internship - Construction | In person | MTWTHF | 7 | 3 | 0 | 2 | 2 | 0 | 1 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| CONS 290 | Internship - Construction | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | |
| CONS 290 | Internship - Construction | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| SUR 119 | Construction Surveying | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 3 | |
| SUR 119 | Construction Surveying | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | |

WNC Course Success Rates by Academic Year (fall, spring, and summer)

| (Total students with C- and above, P, or S grades/total enrolled after removing audits, incompletes and missing grades. Must have at least a total of 10 students enrolled.) | | | | | | | | | |
|--|---------|------------|-------------------------------|---------|---------|---------|---------|---------|----------------|
| Division | Subject | Catalog No | Title | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | Total_Enrolled |
| Career & Technical Ed | CEM | 100 | Fundamentals Construction Mgt | | | | 88.9 | 83.9 | 40 |
| Career & Technical Ed | CADD | 100 | Intro to Comp Aid Dft | 70.5 | 62.5 | 64.7 | 85.0 | 76.5 | 138 |
| Career & Technical Ed | CONS | 108 | Cons Materials & Methods | 88.2 | 94.7 | 100.0 | 100.0 | 85.7 | 59 |
| Career & Technical Ed | CONS | 109 | Cons Materials & Methods II | | | | 100.0 | 100.0 | 27 |
| Career & Technical Ed | CONS | 111 | Commercial Building Codes | | | | | 95.0 | 20 |
| Career & Technical Ed | CONS | 118 | Cons Contract Documents | 90.9 | 81.8 | 100.0 | 100.0 | 95.5 | 56 |
| Career & Technical Ed | CONS | 120 | Blueprint Read/Spec | 81.3 | 77.8 | | 100.0 | 94.7 | 49 |
| Career & Technical Ed | CONS | 121 | Principle Cons Estimating | 85.7 | 75.0 | 100.0 | 100.0 | 100.0 | 32 |
| Career & Technical Ed | CONS | 205 | Construction Site Safety | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 50 |
| Career & Technical Ed | CONS | 281 | Cons Plan Schedule Contrl | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 27 |
| Career & Technical Ed | CONS | 290 | Internship - Construction | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 18 |

WNC Students Enrolled by Course and Academic Year (fall, spring, summer)

| Division | Subject | Catalog No Title | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|-----------------------|---------|---------------------------------|---------|---------|---------|---------|---------|
| Career & Technical Ed | CONS | 108 Cons Materials & Methods | 17 | 19 | 6 | 3 | 14 |
| Career & Technical Ed | CONS | 109 Cons Materials & Methods II | 0 | 0 | 0 | 6 | 21 |
| Career & Technical Ed | CONS | 111 Commercial Building Codes | 0 | 0 | 0 | 0 | 21 |
| Career & Technical Ed | CONS | 118 Cons Contract Documents | 11 | 11 | 7 | 5 | 22 |
| Career & Technical Ed | CONS | 120 Blueprint Read/Spec | 16 | 9 | 0 | 5 | 19 |
| Career & Technical Ed | CONS | 121 Principle Cons Estimating | 7 | 8 | 4 | 8 | 5 |
| Career & Technical Ed | CONS | 205 Construction Site Safety | 2 | 8 | 18 | 7 | 15 |
| Career & Technical Ed | CONS | 281 Cons Plan Schedule Contrl | 10 | 3 | 3 | 3 | 8 |
| Career & Technical Ed | CONS | 290 Internship - Construction | 4 | 3 | 2 | 3 | 6 |
| Career & Technical Ed | CADD | 100 Intro to Comp Aid Dft | 45 | 41 | 17 | 20 | 18 |
| Career & Technical Ed | SUR | 119 Construction Surveying | 0 | 0 | 0 | 0 | 9 |

WNC Degrees and Certificates of Achievement by Fiscal Year

| Degree | Description | CIP Code | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|--------|---------------------------|----------|------|------|------|------|------|------|------|------|------|------|
| AAS | Technology - Construction | 46.0415 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 |

WNC Declared Majors Enrolled as of October 15 or March 15 by Semester

| Division | Degree | Declared Major | Fall 2013 | Spr 2014 | Fall 2014 | Spr 2015 | Fall 2015 | Spr 2016 | Fall 2016 | Spr 2017 | Fall 2017 |
|-----------------------|--------|---------------------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|
| Career & Technical Ed | AAS | Technology - Construction | 0 | 5 | 6 | 5 | 8 | 7 | 13 | 16 | 31 |

Reporting Elements Template
(Please type your responses in the space available)

Technology Program:

General Industrial

1. Program Description

A. College and Program Mission: The college mission and program mission are presented side-by-side in a table to show how the college and program missions align. The program mission states the purpose of the program; names its primary functions, activities and stakeholders; Supports the college mission; and is distinctive.

College Mission

Western Nevada College inspires success in our community through opportunities that cultivate creativity, intellectual growth and technological excellence, in an environment that nurtures individual potential and respects differences.

Program Mission *(What is the mission of your program?) These can also be found on MyWNC*

The purpose of the Associate of Applied Science degree in Technology is to provide employment-related knowledge and skills necessary to succeed in a chosen field of study.

B. College and Program Goals: The College Strategic Goals and the program goals and related outcomes are presented side-by-side in a table to show how they align. Also indicate any linkage to ISLOs (Institutional Student Learning Outcomes) by indicating this alignment with the following shorthand, in parenthesis, next to the aligned program outcome (ISLO x , where x indicates the number of the ISLO).

College Goals

- Improve student success in program completion and graduation rates
- Ensure institutional excellence in teaching, programs and services
- Embrace our college's many communities and respond to their diverse needs.

Program Goals and Outcomes *(What are the Goals and Outcomes of your program?)*

Students who complete programs in occupational areas are expected to demonstrate that they:

- Know the subject matter appropriate to the emphasis of the degree.

Reporting Elements Template

(Please type your responses in the space available)

- Are able to communicate effectively and appropriately, in oral and written form.
- Are able to locate, evaluate and properly utilize the tools and resources appropriate to a technology professional.
- Are able to acquire skills and perform tasks necessary for employment or career enhancement.
- Have developed an appreciation of the importance of social, ethical, legal and diversity issues.
- Have developed an appreciation of the need and importance of lifelong learning.

C. Short Description: Include the following information and append supporting documents as appropriate:

i. Unique characteristics

This degree program brings together a study of foundational concepts of electrical, fluid power, and mechanical elements in addition to basic knowledge of the industrial technology fields of welding and machining.

ii. Concerns or trends affecting the program

There is high demand for cross-discipline abilities and some evidence of a trend where companies seek out multi-skilled technicians instead of specialists.

iii. Significant changes or needs in the next five years

This program will require continued attention from the Applied Industrial Technology (AIT) area to ensure that students are getting broad exposure across multiple subjects.

Matrix Spreadsheet – Separate Document

D. Program SLO/Required Course Matrix: Attach to the report this matrix which maps the student learning outcomes to required courses and shows the degree to which a course addresses an outcome. The matrix should reflect required courses and SLOs for the 2017-2018 catalog. When changes are made to the curriculum, Program SLO/Course Matrices are to be updated and submitted to Institutional Research for publication on the college website.

E. Degrees and/or Certificates Offered: List degrees or certificates that are being evaluated for the purposes of this program review.

AAS Technology: General Industrial

Reporting Elements Template

(Please type your responses in the space available)

F. Niches Served: Describe any niches in the community the program serves, including other academic programs served by program core courses.

This program is designed to broaden the career horizon of a students who are just getting started in the field of industrial technology and are not sure where their strengths will lie, and to provide options for lateral growth for individuals currently working in a specialized area of industrial technology.

2. Quality of Program

A. Evidence of Effectiveness

i. Course Scheduling/Enrollment History Report: *Institutional Research* provides this spreadsheet, which includes course scheduling history and enrollment figures for the most recent four-year period. This report is used to satisfy item #5 of the Curriculum Review Report portion of the program review report.

ii. Summary Data Sheet: *Institutional Research* provides the Summary Data Sheet, a document that provides information on the headcount of students who have declared majors in the program, number of degrees and certificates granted, successful course completion data, student credit hours data, FTE, FTE faculty, workload ratios, and other information that provides a basis for demonstrating program efficiency and effectiveness.

iii. Systematic Assessment: (*This is what is generated from your yearly JOT Form submissions*)

<https://form.jotform.us/71906990133156>

Instructional programs must include evidence that they systematically assess program outcomes and student learning outcomes and that data from assessments are used to make improvements to programs. The final program review report should include the Five-Year Assessment Plan. The report should also indicate the steps taken to make the student learning outcomes public and available to students.

B. Evidence of Satisfaction: Instructional programs may include additional hard data regarding student satisfaction with courses and programs, employer satisfaction studies, etc., as indicators of effectiveness of the program. Results from the Noel-Levitz Student Satisfaction Inventory (2007 and 2009) and the Community College Survey of Student Engagement (2008 and 2012) can be broken out by declared major and are available upon request. Summarized results from Revised and approved May 19, 2017 student course evaluations are another source of satisfaction evidence, and instructors can add one question of their choice to the evaluations. The chair of the PRT should consult with Institutional Research regarding the availability of data.

Reporting Elements Template

(Please type your responses in the space available)

C. Certifications/Licenses: Instructional programs need to explain if there are special certifications or accreditations available to the program and the status of the program relative to these certifications or accreditations.

D. Enrollment Trends: Instructional programs should discuss general student demographics and enrollment trends outlined by the following questions:

a. What student demographic and enrollment trends are most notable?

Students in this program tend to be adults who are coming to college, sometimes for the first time, to improve their career options. The General Industrial major often attracts students who have taken some welding or machining courses who are not sure they want to pursue only those skills.

b. What groups constitute the program's main demographic?

Males.

c. What efforts have been made by the program to recruit students?

This degree program is included in all presentations and tours that involve the Applied Industrial Technology areas of study for the public and for targeted groups. This is a flexible degree plan for students who have been exploring several Career and Technical Education areas through coursework in welding, machining, and/or Applied Industrial Technology (AIT).

d. What initiatives have been undertaken to increase FTE?

This degree program is presented as an option to potential students who know they want to work in a field that involves hands-on activities in an industrial environment, but they are not sure which area is going to be the best one for them to pursue. The flexibility of the program requirement courses is part of what makes this degree attractive to students.

e. What initiatives have been undertaken to improve student retention?

The AIT teaching and support staff work closely together to support students through one-on-one contact and feedback on lab exercises as they practice and prepare for skill checks. Instructors and teaching assistants

(Separate Word Document)

E. Need for the Program: Explain the need and basis for determining the need for the program. Objective data, such as alumni studies, employer perceptions, data on transfer or transfer potential, local employment opportunities, and studies commissioned by WNC or NSHE, should be included when possible.

F. Curriculum Review Report: Attach to this report the Curriculum Review Report and the Curriculum Committee Program Evaluation (the committee's response to the Curriculum Review Report).

Reporting Elements Template

(Please type your responses in the space available)

G. Findings and Recommendations: Present the PRT's commendations and recommendations that are the result of the self-study process. If the review recommends any changes to the program, a detailed description of the specific plan of action to implement the recommendations and a timeline for implementation of the plan are required.

The Associate of Applied Science: Technology degree specialization of General Industrial technology serves a population of students who are exploring a variety of careers in the manufacturing. It is an excellent entry point into a small manufacturing facility who needs a multi-skilled technician instead of a specialist. The background in welding, machining, and electrical systems prepares students to install maintain, and upgrade a variety of industrial components and equipment.

A large majority of manufacturing companies in the United States are small businesses.

In 2015, there were over 250, 000 firms in the manufacturing sector, and over 95% were considered to be small (i.e., having fewer than 500 employees). Businesses of this size cannot afford or maintain a full industrial maintenance staff, and the flexibility of a technician who can independently work in several technical areas is important to their success¹.

Within a few years, the United States will have over 3 million manufacturing jobs to fill, according to a study from Deloitte and the National Association of Manufacturers' Manufacturing Institute². But many of those jobs could go unfilled if we don't train and retrain enough upskilled workers in programs like this General Industrial AAS specialization.

1. <http://www.nam.org/Newsroom/Facts-About-Manufacturing/>

2. <http://www.nam.org/Newsroom/Press-Releases/2018/02/Excerpts--NAM-2018-State-of-Manufacturing-Address/>

| Associate of Applied Science, Technology: General Industrial | | | | | | | | |
|--|--|---|----------|---|---|---|---|---|
| Student Learning Outcomes Matrix | | | | | | | | |
| AAS Technology: General Industrial Degree | | | | | | | | |
| Outcomes | Upon completing a degree at WNC, students must demonstrate: | | | | | | | |
| 1 | WORKING KNOWLEDGE– Identify, describe, and apply information, theories, methodologies and approaches from the sciences, social sciences, and humanities/arts. | | | | | | | |
| 2 | WRITTEN COMMUNICATION – Write effective projects, papers, and reports. | | | | | | | |
| 3 | QUANTITATIVE LITERACY – Present accurate calculations and symbolic operations, and explain how such calculations and operations are used in either the specific field of study or in interpreting information in other fields. | | | | | | | |
| 4 | INFORMATION LITERACY – Locate, evaluate, and appropriately use information from multiple resources to complete projects, activities, and papers. | | | | | | | |
| 5 | DIVERSITY AND SOCIETY – Describe diverse historical and/or contemporary positions on selected democratic values or practices. | | | | | | | |
| 6 | CRITICAL THINKING – Integrate knowledge and skills from the study of sciences, mathematics, social sciences, and the humanities/arts to think critically about and develop solutions to contemporary and/or enduring problems. | | | | | | | |
| 7 | CAREER PREPARATION – Identify, describe, and apply information in the discipline or career area of their choice sufficient for further study and/ or demonstrate competencies required to succeed in the workplace. | | | | | | | |
| Required Courses | | | Outcomes | | | | | |
| Course # | Name | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| AIT 101 | Fundamentals of Applied Industrial Technology | X | | X | X | | X | X |
| AIT 155 | AIT Hands-On Labs | X | X | X | X | | X | X |
| DFT 110 | Blueprint Reading for Industry | X | | | X | | | X |

| | | | | | | | | | | | | | | | | | | | | |
|----------|-------------------------|-----------|-------|----|----|---|----|----|---|----|----|----|----|----|----|----|----|----|-----|-----|
| WELD 211 | Welding I | In person | T | 18 | 15 | 0 | 16 | 15 | 0 | 14 | 15 | 0 | 9 | 14 | 0 | 0 | 0 | 0 | 0 | 116 |
| WELD 211 | Welding I | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 8 | |
| WELD 211 | Welding I | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | |
| WELD 211 | Welding I | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | |
| WELD 211 | Welding I | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | |
| WELD 211 | Welding I | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | |
| WELD 211 | Welding I | In person | MTTHF | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | |
| WELD 211 | Welding I | In person | T | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | |
| WELD 211 | Welding I | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 3 | 7 | 0 | 7 | 28 | |
| WELD 212 | Welding I Practice | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 26 | |
| WELD 212 | Welding I Practice | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 9 | 0 | 7 | 33 | |
| WELD 212 | Welding I Practice | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 19 | |
| WELD 212 | Welding I Practice | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 11 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 13 | |
| WELD 212 | Welding I Practice | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 14 | 0 | 14 | 54 | |
| WELD 212 | Welding I Practice | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 8 | |
| WELD 212 | Welding I Practice | In person | W | 11 | 12 | 0 | 15 | 12 | 0 | 9 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | |
| WELD 212 | Welding I Practice | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | |
| WELD 212 | Welding I Practice | In person | W | 15 | 9 | 0 | 14 | 14 | 0 | 14 | 12 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 83 | |
| WELD 212 | Welding I Practice | In person | M | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | |
| WELD 212 | Welding I Practice | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | |
| WELD 212 | Welding I Practice | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | |
| WELD 212 | Welding I Practice | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | |
| WELD 212 | Welding I Practice | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 4 | 7 | 0 | 8 | 30 | |
| WELD 221 | Welding II | In person | M | 13 | 18 | 0 | 15 | 15 | 0 | 15 | 15 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 121 | |
| WELD 221 | Welding II | In person | MTTHF | 0 | 0 | 0 | 7 | 0 | 9 | 11 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | |
| WELD 221 | Welding II | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 | 7 | 34 | |
| WELD 221 | Welding II | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | |
| WELD 221 | Welding II | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 8 | |
| WELD 221 | Welding II | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 16 | 0 | 10 | 51 | |
| WELD 221 | Welding II | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | |
| WELD 221 | Welding II | In person | MTTHF | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | |
| WELD 221 | Welding II | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | |
| WELD 221 | Welding II | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 4 | 6 | 0 | 7 | 29 | |
| WELD 222 | Welding II Practice | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | |
| WELD 222 | Welding II Practice | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 | 6 | 33 | |
| WELD 222 | Welding II Practice | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| WELD 222 | Welding II Practice | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | |
| WELD 222 | Welding II Practice | In person | W | 0 | 18 | 0 | 10 | 15 | 0 | 12 | 15 | 0 | 14 | 9 | 0 | 7 | 11 | 0 | 7 | 123 |
| WELD 222 | Welding II Practice | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | |
| WELD 222 | Welding II Practice | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | |
| WELD 222 | Welding II Practice | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 4 | 6 | 0 | 7 | 29 | |
| WELD 224 | Welding Projects | In person | | 0 | 0 | 0 | 1 | 5 | 0 | 0 | 0 | 5 | 0 | 0 | 1 | 0 | 0 | 0 | 13 | |
| WELD 224 | Welding Projects | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 8 | |
| WELD 224 | Welding Projects | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | |
| WELD 224 | Welding Projects | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 15 | 0 | 12 | 10 | 46 | |
| WELD 224 | Welding Projects | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | |
| WELD 224 | Welding Projects | In person | TH | 9 | 10 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | |
| WELD 224 | Welding Projects | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 9 | |
| WELD 224 | Welding Projects | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 5 | 0 | 6 | 6 | 0 | 24 | |
| WELD 224 | Welding Projects | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 8 | 6 | 0 | 11 | 48 | |
| WELD 231 | Welding III | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 8 | 0 | 10 | 6 | 34 | |
| WELD 231 | Welding III | In person | MTTHF | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 11 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 43 | |
| WELD 231 | Welding III | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 6 | 14 | |
| WELD 231 | Welding III | In person | TH | 8 | 9 | 0 | 8 | 12 | 0 | 9 | 5 | 0 | 7 | 10 | 0 | 0 | 0 | 0 | 68 | |
| WELD 231 | Welding III | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 9 | |
| WELD 231 | Welding III | In person | MTTHF | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | |
| WELD 231 | Welding III | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 4 | 2 | 0 | 3 | 25 | |
| WELD 232 | Welding III Practice | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 3 | 0 | 8 | 23 | |
| WELD 232 | Welding III Practice | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 25 | |
| WELD 232 | Welding III Practice | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 6 | 14 | |
| WELD 232 | Welding III Practice | In person | TH | 7 | 4 | 0 | 7 | 6 | 0 | 7 | 4 | 0 | 7 | 6 | 0 | 0 | 0 | 0 | 48 | |
| WELD 232 | Welding III Practice | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 9 | |
| WELD 232 | Welding III Practice | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 4 | 2 | 0 | 3 | 24 | |
| WELD 241 | Welding IV | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | |
| WELD 241 | Welding IV | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 8 | 0 | 0 | 22 | |
| WELD 241 | Welding IV | In person | MTTHF | 0 | 0 | 0 | 0 | 2 | 0 | 9 | 10 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 35 | |
| WELD 241 | Welding IV | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 0 | 6 | 14 | |
| WELD 241 | Welding IV | In person | TH | 1 | 4 | 0 | 8 | 5 | 0 | 6 | 5 | 0 | 3 | 7 | 0 | 0 | 0 | 0 | 39 | |
| WELD 241 | Welding IV | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| WELD 241 | Welding IV | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 4 | 3 | 0 | 3 | 22 | |
| WELD 242 | Welding IV Practice | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 6 | 0 | 7 | 18 | |
| WELD 242 | Welding IV Practice | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | |
| WELD 242 | Welding IV Practice | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 0 | 6 | 14 | |
| WELD 242 | Welding IV Practice | In person | TH | 1 | 4 | 0 | 7 | 3 | 0 | 4 | 5 | 0 | 5 | 9 | 0 | 0 | 0 | 0 | 38 | |
| WELD 242 | Welding IV Practice | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | |
| WELD 242 | Welding IV Practice | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| WELD 242 | Welding IV Practice | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 4 | 3 | 0 | 3 | 22 | |
| WELD 250 | Weld Certification Prep | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 11 | |
| WELD 250 | Weld Certification Prep | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 10 | |
| WELD 250 | Weld Certification Prep | In person | MTTH | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| WELD 250 | Weld Certification Prep | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 12 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 35 | |
| WELD 250 | Weld Certification Prep | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 15 | 0 | 12 | 47 | |
| WELD 250 | Weld Certification Prep | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 7 | 0 | 1 | 14 | |
| WELD 250 | Weld Certification Prep | In person | TH | 1 | 5 | 0 | 3 | 0 | 0 | 1 | 5 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 21 | |
| WELD 250 | Weld Certification Prep | In person | TH | 4 | 5 | 0 | 3 | 12 | 0 | 4 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | |
| WELD 250 | Weld Certification Prep | In person | TH | 0 | 0 | 0 | 2 | 2 | 0 | 1 | 3 | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 15 | |
| WELD 250 | Weld Certification Prep | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 9 | |
| WELD 250 | Weld Certification Prep | In person | W | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| WELD 250 | Weld Certification Prep | In person | W | 0 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | |
| WELD 250 | Weld Certification Prep | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 9 | 7 | 0 | 11 | 52 | |
| WELD 290 | Internship in Welding | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| WELD 290 | Internship in Welding</ | | | | | | | | | | | | | | | | | | | |

WNC Course Success Rates by Academic Year (fall, spring, and summer)

(Total students with C- and above, P, or S grades/total enrolled after removing audits, incompletes and missing grades. Must have at least a total of 10 students enrolled.)

| Division | Subject | Catalog No Title | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | Total_Enrolled |
|-----------------------|---------|------------------------------|---------|---------|---------|---------|---------|----------------|
| Career & Technical Ed | AIT | 101 Fund of Industrial Tech | 81.8 | 69.2 | 59.5 | 71.8 | 61.7 | 237 |
| Career & Technical Ed | AIT | 155 AIT Hands On Lab | | 87.5 | 90.9 | 78.0 | 86.8 | 146 |
| Career & Technical Ed | DFT | 110 Blueprint Read/Indust | 75.0 | 80.0 | 87.0 | 90.6 | 84.6 | 196 |
| Career & Technical Ed | MTT | 105 Machine Shop I | 81.8 | 83.1 | 89.8 | 87.5 | 75.0 | 237 |
| Career & Technical Ed | MTT | 106 Machine Shop Practice I | 75.0 | 85.7 | 100.0 | 83.3 | 75.0 | 109 |
| Career & Technical Ed | MTT | 110 Machine Shop II | 93.3 | 94.3 | 92.1 | 89.3 | 94.7 | 150 |
| Career & Technical Ed | MTT | 111 Mach Shop Practice II | 95.7 | 100.0 | 100.0 | 91.7 | 100.0 | 68 |
| Career & Technical Ed | MTT | 230 Comp Numerical Control | 82.4 | 84.6 | 95.0 | 91.3 | 86.4 | 141 |
| Career & Technical Ed | MTT | 232 Comp Numerical Contrl II | 91.7 | 80.0 | 92.6 | 95.7 | 94.4 | 95 |
| Career & Technical Ed | MTT | 250 Machine Shop III | 100.0 | 93.5 | 92.9 | 100.0 | 81.3 | 110 |
| Career & Technical Ed | MTT | 251 Mach Shop Practice III | 100.0 | 77.8 | 100.0 | 100.0 | 85.7 | 46 |
| Career & Technical Ed | MTT | 260 Machine Shop IV | 87.5 | 93.1 | 93.8 | 100.0 | 80.0 | 67 |
| Career & Technical Ed | MTT | 261 Machine Projects | 100.0 | 100.0 | 92.3 | 77.8 | 100.0 | 54 |
| Career & Technical Ed | MTT | 262 Mach Shop Practice IV | 85.7 | 100.0 | 100.0 | 100.0 | 100.0 | 28 |
| Career & Technical Ed | WELD | 211 Welding I | 95.9 | 94.3 | 96.3 | 96.6 | 98.4 | 522 |
| Career & Technical Ed | WELD | 212 Welding I Practice | 95.7 | 94.4 | 94.0 | 96.7 | 98.2 | 360 |
| Career & Technical Ed | WELD | 221 Welding II | 100.0 | 98.6 | 97.4 | 96.8 | 93.0 | 324 |
| Career & Technical Ed | WELD | 222 Welding II Practice | 100.0 | 98.1 | 96.8 | 94.1 | 92.5 | 232 |
| Career & Technical Ed | WELD | 224 Welding Projects | 100.0 | 90.0 | 100.0 | 94.1 | 96.4 | 161 |
| Career & Technical Ed | WELD | 231 Welding III | 100.0 | 95.0 | 94.5 | 93.1 | 96.6 | 197 |
| Career & Technical Ed | WELD | 232 Welding III Practice | 100.0 | 100.0 | 97.8 | 90.9 | 96.3 | 129 |
| Career & Technical Ed | WELD | 241 Welding IV | 100.0 | 93.3 | 96.7 | 96.6 | 100.0 | 130 |
| Career & Technical Ed | WELD | 242 Welding IV Practice | 100.0 | 100.0 | 95.2 | 95.8 | 100.0 | 89 |
| Career & Technical Ed | WELD | 250 Weld Certification Prep | 93.1 | 95.5 | 98.2 | 92.6 | 98.2 | 239 |

WNC Students Enrolled by Course and Academic Year (fall, spring, summer)

| Division | Subject | Catalog No Title | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|-----------------------|---------|------------------------------|---------|---------|---------|---------|---------|
| Career & Technical Ed | AIT | 101 Fund of Industrial Tech | 22 | 26 | 37 | 71 | 83 |
| Career & Technical Ed | AIT | 155 AIT Hands On Lab | 0 | 8 | 11 | 59 | 69 |
| Career & Technical Ed | DFT | 110 Blueprint Read/Indust | 20 | 25 | 46 | 54 | 52 |
| Career & Technical Ed | MTT | 105 Machine Shop I | 55 | 59 | 59 | 33 | 32 |
| Career & Technical Ed | MTT | 106 Machine Shop Practice I | 32 | 21 | 22 | 19 | 16 |
| Career & Technical Ed | MTT | 110 Machine Shop II | 30 | 35 | 38 | 29 | 19 |
| Career & Technical Ed | MTT | 111 Mach Shop Practice II | 23 | 7 | 17 | 12 | 9 |
| Career & Technical Ed | MTT | 230 Comp Numerical Control | 17 | 39 | 40 | 23 | 22 |
| Career & Technical Ed | MTT | 232 Comp Numerical Contrl II | 12 | 15 | 27 | 23 | 18 |
| Career & Technical Ed | MTT | 250 Machine Shop III | 10 | 31 | 28 | 26 | 16 |
| Career & Technical Ed | MTT | 251 Mach Shop Practice III | 10 | 9 | 7 | 13 | 7 |
| Career & Technical Ed | MTT | 260 Machine Shop IV | 8 | 29 | 16 | 9 | 5 |
| Career & Technical Ed | MTT | 261 Machine Projects | 16 | 19 | 13 | 9 | 1 |
| Career & Technical Ed | MTT | 262 Mach Shop Practice IV | 7 | 3 | 9 | 6 | 3 |
| Career & Technical Ed | MTT | 291 Cnc Practice | 2 | 0 | 0 | 0 | 0 |
| Career & Technical Ed | MTT | 295 Work Experience | 1 | 3 | 1 | 1 | 0 |
| Career & Technical Ed | WELD | 211 Welding I | 124 | 141 | 111 | 88 | 63 |
| Career & Technical Ed | WELD | 212 Welding I Practice | 70 | 91 | 85 | 60 | 58 |
| Career & Technical Ed | WELD | 221 Welding II | 68 | 74 | 77 | 64 | 49 |
| Career & Technical Ed | WELD | 222 Welding II Practice | 28 | 52 | 62 | 51 | 40 |
| Career & Technical Ed | WELD | 224 Welding Projects | 11 | 10 | 34 | 51 | 57 |
| Career & Technical Ed | WELD | 231 Welding III | 44 | 40 | 55 | 31 | 32 |
| Career & Technical Ed | WELD | 232 Welding III Practice | 13 | 22 | 45 | 23 | 29 |
| Career & Technical Ed | WELD | 241 Welding IV | 15 | 30 | 30 | 29 | 27 |
| Career & Technical Ed | WELD | 242 Welding IV Practice | 10 | 9 | 21 | 25 | 26 |
| Career & Technical Ed | WELD | 250 Weld Certification Prep | 29 | 44 | 57 | 54 | 56 |
| Career & Technical Ed | WELD | 290 Internship in Welding | 0 | 0 | 0 | 0 | 2 |

WNC Degrees and Certificates of Achievement by Fiscal Year

[illegible]

WNC Declared Majors Enrolled as of October 15 or March 15 by Semester

| Division | Degree | Declared Major | Fall 2013 | Spr 2014 | Fall 2014 | Spr 2015 | Fall 2015 | Spr 2016 | Fall 2016 | Spr 2017 | Fall 2017 |
|-----------------------|--------|-------------------------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|
| Career & Technical Ed | AAS | Technology-General Industrial | 31 | 17 | 14 | 14 | 15 | 10 | 10 | 10 | 8 |

Reporting Elements Template
(Please type your responses in the space available)

Technology Program:
Machine Tool Technology (MTT)

1. Program Description

A. College and Program Mission: The college mission and program mission are presented side-by-side in a table to show how the college and program missions align. The program mission states the purpose of the program; names its primary functions, activities and stakeholders; Supports the college mission; and is distinctive.

College Mission

Western Nevada College inspires success in our community through opportunities that cultivate creativity, intellectual growth and technological excellence, in an environment that nurtures individual potential and respects differences.

Program Mission *(What is the mission of your program?) These can also be found on MyWNC*
Our mission is to facilitate the acquisition and advancement of the relevant skills and knowledge in machining equipment and processes in order to enable students' employment and ongoing success in this technology. Increasing both the mechanical cognition and hands-on skills of our students are paramount to achieving these goals.

B. College and Program Goals: The College Strategic Goals and the program goals and related outcomes are presented side-by-side in a table to show how they align. Also indicate any linkage to ISLOs (Institutional Student Learning Outcomes) by indicating this alignment with the following shorthand, in parenthesis, next to the aligned program outcome (ISLO x , where x indicates the number of the ISLO).

College Goals

- Improve student success in program completion and graduation rates
- Ensure institutional excellence in teaching, programs and services
- Embrace our college's many communities and respond to their diverse needs.

Reporting Elements Template

(Please type your responses in the space available)

Program Goals and Outcomes *(What are the Goals and Outcomes of your program?)*

- Demonstrable competency with, and fluency in the current scope of machining practices.
- An understanding of the general expectations of employers relevant to new employees in this field.
- Appreciation and recognition of appropriate behaviors in both the educational and working environments.

C. Short Description: Include the following information and append supporting documents as appropriate:

i. Unique characteristics

Success in machining is a blend of acquired knowledge, mechanical and spatial aptitudes, and a desire to further one's skill development.

ii. Concerns or trends affecting the program

The ongoing need for qualified machinists is only going to increase in the future, with a concomitant desire from employers for greater employee skill levels.

iii. Significant changes or needs in the next five years

Increased outreach to potential students to advance awareness of lucrative career opportunities.

Matrix Spreadsheet – Separate Document

D. Program SLO/Required Course Matrix: Attach to the report this matrix which maps the student learning outcomes to required courses and shows the degree to which a course addresses an outcome. The matrix should reflect required courses and SLOs for the 2017-2018 catalog. When changes are made to the curriculum, Program SLO/Course Matrices are to be updated and submitted to Institutional Research for publication on the college website.

E. Degrees and/or Certificates Offered: List degrees or certificates that are being evaluated for the purposes of this program review.

Associate of Applied Science-Technology

F. Niches Served: Describe any niches in the community the program serves, including other academic programs served by program core courses.

We facilitate older students with manufacturing backgrounds to maintain and increase their knowledge base, even if they are no longer working or full-time. We also partner with Job Connect and JOIN to aid local employers in hiring suitable employees.

Reporting Elements Template

(Please type your responses in the space available)

2. Quality of Program

A. Evidence of Effectiveness

i. Course Scheduling/Enrollment History Report: *Institutional Research* provides this spreadsheet, which includes course scheduling history and enrollment figures for the most recent four-year period. This report is used to satisfy item #5 of the Curriculum Review Report portion of the program review report.

ii. Summary Data Sheet: *Institutional Research* provides the Summary Data Sheet, a document that provides information on the headcount of students who have declared majors in the program, number of degrees and certificates granted, successful course completion data, student credit hours data, FTE, FTE faculty, workload ratios, and other information that provides a basis for demonstrating program efficiency and effectiveness.

iii. Systematic Assessment: (*This is what is generated from your yearly JOT Form submissions*)

<https://form.jotform.us/71906990133156>

Instructional programs must include evidence that they systematically assess program outcomes and student learning outcomes and that data from assessments are used to make improvements to programs. The final program review report should include the Five-Year Assessment Plan. The report should also indicate the steps taken to make the student learning outcomes public and available to students.

B. Evidence of Satisfaction: Instructional programs may include additional hard data regarding student satisfaction with courses and programs, employer satisfaction studies, etc., as indicators of effectiveness of the program. Results from the Noel-Levitz Student Satisfaction Inventory (2007 and 2009) and the Community College Survey of Student Engagement (2008 and 2012) can be broken out by declared major and are available upon request. Summarized results from Revised and approved May 19, 2017 student course evaluations are another source of satisfaction evidence, and instructors can add one question of their choice to the evaluations. The chair of the PRT should consult with Institutional Research regarding the availability of data.

C. Certifications/Licenses: Instructional programs need to explain if there are special certifications or accreditations available to the program and the status of the program relative to these certifications or accreditations.

Reporting Elements Template

(Please type your responses in the space available)

D. Enrollment Trends: Instructional programs should discuss general student demographics and enrollment trends outlined by the following questions:

a. What student demographic and enrollment trends are most notable?

A notable increase in enrollees professing a desire to move to a steadier, more remunerative occupation.

b. What groups constitute the program's main demographic?

Predominantly somewhat older (i.e. >22 y.o.) non-scholastic background males

c. What efforts have been made by the program to recruit students?

Speaking to a wide variety of people in social venues, to increase the perception of desirability of machining as a career option.

d. What initiatives have been undertaken to increase FTE?

The requirement by the College that a degree program must be declared in order to enroll in classes.

e. What initiatives have been undertaken to improve student retention?

The constant verbal pursuit of student feedback in order to ascertain their satisfaction with their knowledge, skill levels, and technical competency.

(Separate Word Document)

E. Need for the Program: Explain the need and basis for determining the need for the program.

Objective data, such as alumni studies, employer perceptions, data on transfer or transfer potential, local employment opportunities, and studies commissioned by W NC or NSHE, should be included when possible.

F. Curriculum Review Report: Attach to this report the Curriculum Review Report and the Curriculum Committee Program Evaluation (the committee's response to the Curriculum Review Report).

G. Findings and Recommendations: Present the PRT's commendations and recommendations that are the result of the self-study process. If the review recommends any changes to the program, a detailed description of the specific plan of action to implement the recommendations and a timeline for implementation of the plan are required.

MTT

Given the relentless march of technology in our times, the need for emphasis on machine tool education is incontrovertible. The ongoing ascendance in the utilization of computer numeric control (CNC) in all types of manufacturing industry predicates greater necessity of efforts to create qualified candidates to fill these positions. My own experience in interacting with the various manufacturing firms in the Carson City area (via student factory tours-“field trips”, conversations with company principals, H.R. depts., etc.) validates this reality. Currently, I have ten or twelve firms looking to us for qualified trainees on a continuing basis, and ordinarily am contacted by an additional one or two firms per semester. Among these firms with repeated hiring interest I am in contact with are Baker-Hughes (G.E.), Vineburg Machining, Inc., C.G.I., Inc., and PME Babbitt Bearings, who represent a cross-section of local manufacturers, varying in number of employees, levels of machining complexity, and sophistication of processes and products.

As to placement success, most recently in Fall 2017 Accelerated MTT had seven students, four of which were subsequently employed by my contacts, one moved back East (employment outcome unknown), and two were not seeking employment due to continued schooling toward completing their AAS degree prior to a job search.

In summary, the increasing demand both locally and regionally for trained machine tool candidates, and our progress in placing such candidates in this industry, would seem to more than justify the continuation of the MTT program.

Respectfully submitted,

David Fulton

| |
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| |
| Associate of Applied Science, Machine Tool Technology Program |

| Student Learning Outcomes Matrix | | | | | | | | | |
|----------------------------------|--|--|--|--|--|--|--|--|--|
|----------------------------------|--|--|--|--|--|--|--|--|--|

Machine Tool Technology AAS Degree

| Outcomes* | |
|-----------|--|
| 1 | Student will know safety standards for the industry and how to apply them in any manufacturing environment. |
| 2 | Student will know how to set-up and operate various types of machinery used in the machine tool trade (including both manual and automated machines?). |
| 3 | Students will be able to analyze blue prints of machined parts. |
| 4 | Students will be able to analyze machining projects and develop a plan to achieve a finished product. |
| 5 | Students have an understanding of work ethics, morals, and standard shop procedures. |

[illegible]

WNC Total Enrollment in Classes by Location, Instruction Mode, Day of the Week and Time of Day

| | | | | | | | | | | | | | | | | | | | | | | GRAND TOTAL |
|---------|--------------------------|-----------|-------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|----------------|
| CLASS | CLASS TITLE | MODE | DAY | Fall 2011 | Spr 2012 | Sum 2012 | Fall 2012 | Spr 2013 | Sum 2013 | Fall 2013 | Spr 2014 | Sum 2014 | Fall 2014 | Spr 2015 | Sum 2015 | Fall 2015 | Spr 2016 | Sum 2016 | Fall 2016 | Spr 2017 | Sum 2017 | ENROLLED |
| DFT 110 | Blueprint Read/Indust | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 17 |
| DFT 110 | Blueprint Read/Indust | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 16 | 0 | 13 | 13 | 0 | 51 |
| DFT 110 | Blueprint Read/Indust | In person | T | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 52 |
| DFT 110 | Blueprint Read/Indust | In person | TH | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 12 | 0 | 81 |
| DFT 110 | Blueprint Read/Indust | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| MTT 105 | Machine Shop I | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| MTT 105 | Machine Shop I | In person | | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| MTT 105 | Machine Shop I | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 2 | 0 | 5 |
| MTT 105 | Machine Shop I | In person | M | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| MTT 105 | Machine Shop I | In person | M | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| MTT 105 | Machine Shop I | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 5 | 0 | 0 | 12 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 35 |
| MTT 105 | Machine Shop I | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| MTT 105 | Machine Shop I | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 6 | 4 | 0 | 18 |
| MTT 105 | Machine Shop I | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 |
| MTT 105 | Machine Shop I | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 5 | 5 | 0 | 9 | 5 | 0 | 32 |
| MTT 105 | Machine Shop I | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 10 |
| MTT 105 | Machine Shop I | In person | W | 9 | 0 | 0 | 17 | 3 | 0 | 8 | 2 | 0 | 5 | 5 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 52 |
| MTT 105 | Machine Shop I | In person | W | 18 | 17 | 0 | 18 | 17 | 0 | 17 | 14 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 118 |
| MTT 106 | Machine Shop Practice I | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| MTT 106 | Machine Shop Practice I | In person | | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| MTT 106 | Machine Shop Practice I | In person | M | 7 | 0 | 0 | 9 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| MTT 106 | Machine Shop Practice I | In person | M | 6 | 7 | 0 | 13 | 5 | 0 | 11 | 9 | 0 | 8 | 10 | 0 | 2 | 5 | 0 | 6 | 6 | 0 | 88 |
| MTT 106 | Machine Shop Practice I | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 6 | 6 | 0 | 4 | 0 | 0 | 20 |
| MTT 110 | Machine Shop II | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| MTT 110 | Machine Shop II | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 4 |
| MTT 110 | Machine Shop II | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 5 | 0 | 0 | 12 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 35 |
| MTT 110 | Machine Shop II | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| MTT 110 | Machine Shop II | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 5 | 4 | 0 | 17 |
| MTT 110 | Machine Shop II | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| MTT 110 | Machine Shop II | In person | T | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| MTT 110 | Machine Shop II | In person | T | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| MTT 110 | Machine Shop II | In person | T | 11 | 16 | 0 | 6 | 15 | 0 | 5 | 7 | 0 | 9 | 6 | 0 | 7 | 2 | 0 | 3 | 4 | 0 | 91 |
| MTT 110 | Machine Shop II | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| MTT 110 | Machine Shop II | In person | W | 2 | 0 | 0 | 1 | 8 | 0 | 0 | 5 | 0 | 3 | 2 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 24 |
| MTT 111 | Mach Shop Practice II | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| MTT 111 | Mach Shop Practice II | In person | M | 4 | 0 | 0 | 4 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| MTT 111 | Mach Shop Practice II | In person | M | 7 | 6 | 0 | 1 | 9 | 0 | 0 | 6 | 0 | 4 | 10 | 0 | 2 | 5 | 0 | 5 | 4 | 0 | 59 |
| MTT 111 | Mach Shop Practice II | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 8 |
| MTT 230 | Comp Numerical Control | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 5 | 0 | 0 | 10 | 0 | 6 | 0 | 0 | 5 | 0 | 0 | 38 |
| MTT 230 | Comp Numerical Control | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| MTT 230 | Comp Numerical Control | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 4 | 0 | 11 |
| MTT 230 | Comp Numerical Control | In person | W | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| MTT 230 | Comp Numerical Control | In person | W | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| MTT 230 | Comp Numerical Control | In person | W | 0 | 10 | 0 | 9 | 8 | 0 | 13 | 9 | 0 | 13 | 11 | 0 | 6 | 4 | 0 | 7 | 6 | 0 | 96 |
| MTT 232 | Comp Numerical Contrl II | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 10 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 21 |

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|----------|--------------------------|-----------|--------|----|----|---|----|----|---|----|----|---|----|----|---|----|----|---|----|----|---|-----|
| MTT 232 | Comp Numerical Contrl II | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| MTT 232 | Comp Numerical Contrl II | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 5 | 4 | 0 | 16 |
| MTT 232 | Comp Numerical Contrl II | In person | TH | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| MTT 232 | Comp Numerical Contrl II | In person | TH | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| MTT 232 | Comp Numerical Contrl II | In person | W | 0 | 4 | 0 | 7 | 5 | 0 | 5 | 5 | 0 | 6 | 5 | 0 | 4 | 6 | 0 | 3 | 6 | 0 | 56 |
| MTT 250 | Machine Shop III | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| MTT 250 | Machine Shop III | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 5 | 0 | 0 | 11 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 34 |
| MTT 250 | Machine Shop III | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| MTT 250 | Machine Shop III | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 6 | 4 | 0 | 18 |
| MTT 250 | Machine Shop III | In person | MTWTHF | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| MTT 250 | Machine Shop III | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| MTT 250 | Machine Shop III | In person | TH | 10 | 3 | 0 | 1 | 4 | 0 | 8 | 1 | 0 | 6 | 1 | 0 | 3 | 5 | 0 | 3 | 0 | 0 | 45 |
| MTT 250 | Machine Shop III | In person | W | 0 | 0 | 0 | 2 | 2 | 0 | 1 | 4 | 0 | 4 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 16 |
| MTT 251 | Mach Shop Practice III | In person | M | 6 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| MTT 251 | Mach Shop Practice III | In person | M | 3 | 3 | 0 | 3 | 1 | 0 | 6 | 3 | 0 | 5 | 2 | 0 | 4 | 2 | 0 | 3 | 3 | 0 | 38 |
| MTT 251 | Mach Shop Practice III | In person | MTWTHF | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| MTT 251 | Mach Shop Practice III | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 0 | 1 | 0 | 0 | 8 |
| MTT 260 | Machine Shop IV | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 1 | 0 | 6 |
| MTT 260 | Machine Shop IV | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| MTT 260 | Machine Shop IV | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| MTT 260 | Machine Shop IV | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| MTT 260 | Machine Shop IV | In person | TH | 0 | 6 | 0 | 1 | 3 | 0 | 4 | 6 | 0 | 1 | 4 | 0 | 1 | 2 | 0 | 1 | 0 | 0 | 29 |
| MTT 260 | Machine Shop IV | In person | W | 6 | 0 | 0 | 2 | 1 | 0 | 2 | 0 | 0 | 1 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 17 |
| MTT 261 | Machine Projects | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 3 |
| MTT 261 | Machine Projects | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MTT 261 | Machine Projects | In person | TH | 8 | 9 | 0 | 3 | 3 | 0 | 5 | 5 | 0 | 3 | 4 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 47 |
| MTT 261 | Machine Projects | In person | W | 0 | 0 | 0 | 6 | 4 | 0 | 6 | 3 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| MTT 262 | Mach Shop Practice IV | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MTT 262 | Mach Shop Practice IV | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| MTT 262 | Mach Shop Practice IV | In person | M | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| MTT 262 | Mach Shop Practice IV | In person | M | 2 | 1 | 0 | 3 | 0 | 0 | 1 | 2 | 0 | 1 | 5 | 0 | 0 | 4 | 0 | 0 | 1 | 0 | 20 |
| MTT 262 | Mach Shop Practice IV | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 4 |
| MTT 262 | Mach Shop Practice IV | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MTT 262 | Mach Shop Practice IV | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| MTT 291 | Cnc Practice | In person | M | 0 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| MTT 295 | Work Experience | In person | | 0 | 2 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 8 |
| AIT 101 | Fund of Industrial Tech | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| AIT 101 | Fund of Industrial Tech | Online | | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| AIT 101 | Fund of Industrial Tech | In person | | 0 | 0 | 0 | 4 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| AIT 101 | Fund of Industrial Tech | Online | | 0 | 6 | 6 | 0 | 14 | 4 | 0 | 6 | 0 | 0 | 24 | 5 | 35 | 28 | 8 | 54 | 21 | 8 | 219 |
| WELD 211 | Welding I | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| WELD 211 | Welding I | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| WELD 211 | Welding I | In person | MTTHF | 0 | 0 | 0 | 0 | 6 | 0 | 9 | 13 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 |
| WELD 211 | Welding I | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 9 | 0 | 7 | 9 | 0 | 33 |
| WELD 211 | Welding I | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| WELD 211 | Welding I | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| WELD 211 | Welding I | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 15 | 0 | 16 | 16 | 0 | 62 |
| WELD 211 | Welding I | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 12 | 0 | 0 | 0 | 0 | 26 |
| WELD 211 | Welding I | In person | T | 17 | 17 | 0 | 15 | 15 | 0 | 15 | 14 | 0 | 13 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 112 |

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|----------|---------------------|-----------|-------|----|----|---|----|----|---|----|----|---|----|----|---|----|----|---|----|----|-----|
| WELD 211 | Welding I | In person | T | 18 | 15 | 0 | 16 | 15 | 0 | 14 | 15 | 0 | 9 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 116 |
| WELD 211 | Welding I | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| WELD 211 | Welding I | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| WELD 211 | Welding I | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| WELD 211 | Welding I | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| WELD 211 | Welding I | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| WELD 211 | Welding I | In person | MTTHF | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| WELD 211 | Welding I | In person | T | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| WELD 211 | Welding I | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 3 | 7 | 0 | 7 | 6 | 28 |
| WELD 212 | Welding I Practice | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| WELD 212 | Welding I Practice | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 9 | 0 | 7 | 9 | 33 |
| WELD 212 | Welding I Practice | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| WELD 212 | Welding I Practice | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| WELD 212 | Welding I Practice | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 14 | 0 | 14 | 13 | 54 |
| WELD 212 | Welding I Practice | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| WELD 212 | Welding I Practice | In person | W | 11 | 12 | 0 | 15 | 12 | 0 | 9 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 67 |
| WELD 212 | Welding I Practice | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| WELD 212 | Welding I Practice | In person | W | 15 | 9 | 0 | 14 | 14 | 0 | 14 | 12 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 83 |
| WELD 212 | Welding I Practice | In person | M | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| WELD 212 | Welding I Practice | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| WELD 212 | Welding I Practice | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| WELD 212 | Welding I Practice | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| WELD 212 | Welding I Practice | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 4 | 7 | 0 | 8 | 6 | 30 |
| WELD 221 | Welding II | In person | M | 13 | 18 | 0 | 15 | 15 | 0 | 15 | 15 | 0 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 121 |
| WELD 221 | Welding II | In person | MTTHF | 0 | 0 | 0 | 0 | 7 | 0 | 9 | 11 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 |
| WELD 221 | Welding II | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 | 7 | 9 | 34 |
| WELD 221 | Welding II | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| WELD 221 | Welding II | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| WELD 221 | Welding II | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 16 | 0 | 10 | 10 | 51 |
| WELD 221 | Welding II | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| WELD 221 | Welding II | In person | MTTHF | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| WELD 221 | Welding II | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| WELD 221 | Welding II | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 4 | 6 | 0 | 7 | 5 | 29 |
| WELD 222 | Welding II Practice | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| WELD 222 | Welding II Practice | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 | 6 | 9 | 33 |
| WELD 222 | Welding II Practice | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| WELD 222 | Welding II Practice | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| WELD 222 | Welding II Practice | In person | W | 0 | 18 | 0 | 10 | 15 | 0 | 12 | 15 | 0 | 14 | 9 | 0 | 7 | 11 | 0 | 7 | 5 | 123 |
| WELD 222 | Welding II Practice | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| WELD 222 | Welding II Practice | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| WELD 222 | Welding II Practice | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 4 | 6 | 0 | 7 | 5 | 29 |
| WELD 224 | Welding Projects | In person | | 0 | 0 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 13 |
| WELD 224 | Welding Projects | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| WELD 224 | Welding Projects | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| WELD 224 | Welding Projects | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 15 | 0 | 12 | 10 | 46 |
| WELD 224 | Welding Projects | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| WELD 224 | Welding Projects | In person | TH | 9 | 10 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |

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|----------|-------------------------|-----------|-------|---|---|---|---|----|---|---|----|---|----|----|----|----|----|----|----|----|----|
| WELD 224 | Welding Projects | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| WELD 224 | Welding Projects | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 5 | 0 | 6 | 6 | 0 | 24 |
| WELD 224 | Welding Projects | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 8 | 6 | 0 | 11 | 11 | 0 | 48 |
| WELD 231 | Welding III | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 8 | 0 | 10 | 6 | 0 | 34 |
| WELD 231 | Welding III | In person | MTTHF | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 11 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 |
| WELD 231 | Welding III | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 6 | 1 | 0 | 14 |
| WELD 231 | Welding III | In person | TH | 8 | 9 | 0 | 8 | 12 | 0 | 9 | 5 | 0 | 7 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 68 |
| WELD 231 | Welding III | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| WELD 231 | Welding III | In person | MTTHF | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| WELD 231 | Welding III | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 4 | 2 | 0 | 3 | 6 | 25 |
| WELD 232 | Welding III Practice | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 3 | 0 | 8 | 5 | 0 | 23 |
| WELD 232 | Welding III Practice | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| WELD 232 | Welding III Practice | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 6 | 1 | 0 | 14 |
| WELD 232 | Welding III Practice | In person | TH | 7 | 4 | 0 | 7 | 6 | 0 | 7 | 4 | 0 | 7 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 48 |
| WELD 232 | Welding III Practice | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| WELD 232 | Welding III Practice | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 4 | 2 | 0 | 3 | 6 | 24 |
| WELD 241 | Welding IV | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 |
| WELD 241 | Welding IV | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 8 | 0 | 0 | 7 | 22 |
| WELD 241 | Welding IV | In person | MTTHF | 0 | 0 | 0 | 0 | 2 | 0 | 9 | 10 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 |
| WELD 241 | Welding IV | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 0 | 6 | 1 | 14 |
| WELD 241 | Welding IV | In person | TH | 1 | 4 | 0 | 8 | 5 | 0 | 6 | 5 | 0 | 3 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 39 |
| WELD 241 | Welding IV | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WELD 241 | Welding IV | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 4 | 3 | 0 | 3 | 6 | 22 |
| WELD 242 | Welding IV Practice | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 6 | 0 | 0 | 7 | 18 |
| WELD 242 | Welding IV Practice | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| WELD 242 | Welding IV Practice | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 0 | 6 | 1 | 14 |
| WELD 242 | Welding IV Practice | In person | TH | 1 | 4 | 0 | 7 | 3 | 0 | 4 | 5 | 0 | 5 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 38 |
| WELD 242 | Welding IV Practice | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| WELD 242 | Welding IV Practice | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WELD 242 | Welding IV Practice | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 4 | 3 | 0 | 3 | 6 | 22 |
| WELD 250 | Weld Certification Prep | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| WELD 250 | Weld Certification Prep | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 10 |
| WELD 250 | Weld Certification Prep | In person | MTTH | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| WELD 250 | Weld Certification Prep | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 12 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 |
| WELD 250 | Weld Certification Prep | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 15 | 0 | 12 | 10 | 47 |
| WELD 250 | Weld Certification Prep | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 7 | 0 | 1 | 0 | 14 |
| WELD 250 | Weld Certification Prep | In person | TH | 1 | 5 | 0 | 3 | 0 | 0 | 1 | 5 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| WELD 250 | Weld Certification Prep | In person | TH | 4 | 5 | 0 | 3 | 12 | 0 | 4 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 |
| WELD 250 | Weld Certification Prep | In person | TH | 0 | 0 | 0 | 2 | 2 | 0 | 1 | 3 | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| WELD 250 | Weld Certification Prep | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| WELD 250 | Weld Certification Prep | In person | W | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| WELD 250 | Weld Certification Prep | In person | W | 0 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| WELD 250 | Weld Certification Prep | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 9 | 7 | 0 | 11 | 12 | 52 |
| WELD 290 | Internship in Welding | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WELD 290 | Internship in Welding | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 |

WNC Course Success Rates by Academic Year (fall, spring, and summer)

(Total students with C- and above, P, or S grades/total enrolled after removing audits, incompletes and missing grades. Must have at least a total of 10 students enrolled.)

| Division | Subject | Catalog No Title | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | Total_Enrolled |
|-----------------------|---------|------------------------------|---------|---------|---------|---------|---------|----------------|
| Career & Technical Ed | AIT | 101 Fund of Industrial Tech | 81.8 | 69.2 | 59.5 | 71.8 | 61.7 | 237 |
| Career & Technical Ed | DFT | 110 Blueprint Read/Indust | 75.0 | 80.0 | 87.0 | 90.6 | 84.6 | 196 |
| Career & Technical Ed | MTT | 105 Machine Shop I | 81.8 | 83.1 | 89.8 | 87.5 | 75.0 | 237 |
| Career & Technical Ed | MTT | 106 Machine Shop Practice I | 75.0 | 85.7 | 100.0 | 83.3 | 75.0 | 109 |
| Career & Technical Ed | MTT | 110 Machine Shop II | 93.3 | 94.3 | 92.1 | 89.3 | 94.7 | 150 |
| Career & Technical Ed | MTT | 111 Mach Shop Practice II | 95.7 | 100.0 | 100.0 | 91.7 | 100.0 | 68 |
| Career & Technical Ed | MTT | 230 Comp Numerical Control | 82.4 | 84.6 | 95.0 | 91.3 | 86.4 | 141 |
| Career & Technical Ed | MTT | 232 Comp Numerical Contrl II | 91.7 | 80.0 | 92.6 | 95.7 | 94.4 | 95 |
| Career & Technical Ed | MTT | 250 Machine Shop III | 100.0 | 93.5 | 92.9 | 100.0 | 81.3 | 110 |
| Career & Technical Ed | MTT | 251 Mach Shop Practice III | 100.0 | 77.8 | 100.0 | 100.0 | 85.7 | 46 |
| Career & Technical Ed | MTT | 260 Machine Shop IV | 87.5 | 93.1 | 93.8 | 100.0 | 80.0 | 67 |
| Career & Technical Ed | MTT | 261 Machine Projects | 100.0 | 100.0 | 92.3 | 77.8 | 100.0 | 54 |
| Career & Technical Ed | MTT | 262 Mach Shop Practice IV | 85.7 | 100.0 | 100.0 | 100.0 | 100.0 | 28 |
| Career & Technical Ed | WELD | 211 Welding I | 95.9 | 94.3 | 96.3 | 96.6 | 98.4 | 522 |
| Career & Technical Ed | WELD | 212 Welding I Practice | 95.7 | 94.4 | 94.0 | 96.7 | 98.2 | 360 |
| Career & Technical Ed | WELD | 221 Welding II | 100.0 | 98.6 | 97.4 | 96.8 | 93.0 | 324 |
| Career & Technical Ed | WELD | 222 Welding II Practice | 100.0 | 98.1 | 96.8 | 94.1 | 92.5 | 232 |
| Career & Technical Ed | WELD | 224 Welding Projects | 100.0 | 90.0 | 100.0 | 94.1 | 96.4 | 161 |
| Career & Technical Ed | WELD | 231 Welding III | 100.0 | 95.0 | 94.5 | 93.1 | 96.6 | 197 |
| Career & Technical Ed | WELD | 232 Welding III Practice | 100.0 | 100.0 | 97.8 | 90.9 | 96.3 | 129 |
| Career & Technical Ed | WELD | 241 Welding IV | 100.0 | 93.3 | 96.7 | 96.6 | 100.0 | 130 |
| Career & Technical Ed | WELD | 242 Welding IV Practice | 100.0 | 100.0 | 95.2 | 95.8 | 100.0 | 89 |
| Career & Technical Ed | WELD | 250 Weld Certification Prep | 93.1 | 95.5 | 98.2 | 92.6 | 98.2 | 239 |

WNC Students Enrolled by Course and Academic Year (fall, spring, summer)

| Division | Subject | Catalog No Title | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|-----------------------|---------|------------------------------|---------|---------|---------|---------|---------|
| Career & Technical Ed | AIT | 101 Fund of Industrial Tech | 22 | 26 | 37 | 71 | 83 |
| Career & Technical Ed | DFT | 110 Blueprint Read/Indust | 20 | 25 | 46 | 54 | 52 |
| Career & Technical Ed | MTT | 105 Machine Shop I | 55 | 59 | 59 | 33 | 32 |
| Career & Technical Ed | MTT | 106 Machine Shop Practice I | 32 | 21 | 22 | 19 | 16 |
| Career & Technical Ed | MTT | 110 Machine Shop II | 30 | 35 | 38 | 29 | 19 |
| Career & Technical Ed | MTT | 111 Mach Shop Practice II | 23 | 7 | 17 | 12 | 9 |
| Career & Technical Ed | MTT | 230 Comp Numerical Control | 17 | 39 | 40 | 23 | 22 |
| Career & Technical Ed | MTT | 232 Comp Numerical Contrl II | 12 | 15 | 27 | 23 | 18 |
| Career & Technical Ed | MTT | 250 Machine Shop III | 10 | 31 | 28 | 26 | 16 |
| Career & Technical Ed | MTT | 251 Mach Shop Practice III | 10 | 9 | 7 | 13 | 7 |
| Career & Technical Ed | MTT | 260 Machine Shop IV | 8 | 29 | 16 | 9 | 5 |
| Career & Technical Ed | MTT | 261 Machine Projects | 16 | 19 | 13 | 9 | 1 |
| Career & Technical Ed | MTT | 262 Mach Shop Practice IV | 7 | 3 | 9 | 6 | 3 |
| Career & Technical Ed | MTT | 291 Cnc Practice | 2 | 0 | 0 | 0 | 0 |
| Career & Technical Ed | MTT | 295 Work Experience | 1 | 3 | 1 | 1 | 0 |
| Career & Technical Ed | WELD | 211 Welding I | 124 | 141 | 111 | 88 | 63 |
| Career & Technical Ed | WELD | 212 Welding I Practice | 70 | 91 | 85 | 60 | 58 |
| Career & Technical Ed | WELD | 221 Welding II | 68 | 74 | 77 | 64 | 49 |
| Career & Technical Ed | WELD | 222 Welding II Practice | 28 | 52 | 62 | 51 | 40 |
| Career & Technical Ed | WELD | 224 Welding Projects | 11 | 10 | 34 | 51 | 57 |
| Career & Technical Ed | WELD | 231 Welding III | 44 | 40 | 55 | 31 | 32 |
| Career & Technical Ed | WELD | 232 Welding III Practice | 13 | 22 | 45 | 23 | 29 |
| Career & Technical Ed | WELD | 241 Welding IV | 15 | 30 | 30 | 29 | 27 |
| Career & Technical Ed | WELD | 242 Welding IV Practice | 10 | 9 | 21 | 25 | 26 |
| Career & Technical Ed | WELD | 250 Weld Certification Prep | 29 | 44 | 57 | 54 | 56 |
| Career & Technical Ed | WELD | 290 Internship in Welding | 0 | 0 | 0 | 0 | 2 |

WNC Degrees and Certificates of Achievement by Fiscal Year

| Degree | Description | CIP Code | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|--------|---------------------------|----------|------|------|------|------|------|------|------|------|------|------|
| AAS | Technology - Machine Tool | 48.0501 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 8 | 5 |

WNC Declared Majors Enrolled as of October 15 or March 15 by Semester

| Division | Degree | Declared Major | Fall 2013 | Spr 2014 | Fall 2014 | Spr 2015 | Fall 2015 | Spr 2016 | Fall 2016 | Spr 2017 | Fall 2017 |
|-----------------------|--------|---------------------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|
| Career & Technical Ed | AAS | Technology - Machine Tool | 0 | 9 | 15 | 25 | 20 | 22 | 14 | 13 | 22 |

Reporting Elements Template
(Please type your responses in the space available)

Technology Program:

Mechatronics

1. Program Description

A. College and Program Mission: The college mission and program mission are presented side-by-side in a table to show how the college and program missions align. The program mission states the purpose of the program; names its primary functions, activities and stakeholders; Supports the college mission; and is distinctive.

College Mission

Western Nevada College inspires success in our community through opportunities that cultivate creativity, intellectual growth and technological excellence, in an environment that nurtures individual potential and respects differences.

Program Mission (*What is the mission of your program?*) *These can also be found on MyWNC*

The Associate of Applied Science Technology degree specialization of Mechatronics will provide employment-related knowledge and skills necessary to succeed in the technical field of mechatronics by meeting employer-driven criteria and preparing students for industry certification.

B. College and Program Goals: The College Strategic Goals and the program goals and related outcomes are presented side-by-side in a table to show how they align. Also indicate any linkage to ISLOs (Institutional Student Learning Outcomes) by indicating this alignment with the following shorthand, in parenthesis, next to the aligned program outcome (ISLO x , where x indicates the number of the ISLO).

College Goals

- Improve student success in program completion and graduation rates
- Ensure institutional excellence in teaching, programs and services
- Embrace our college's many communities and respond to their diverse needs.

Reporting Elements Template

(Please type your responses in the space available)

Program Goals and Outcomes (*What are the Goals and Outcomes of your program?*)

Students who complete the AAS Technology degree with the specialization of Mechatronics are expected to demonstrate that they:

- Know the subject matter appropriate to mechatronics (SLO 1, 3, 4, 6, 7).
- Are able to communicate effectively and appropriately, in oral and written form (SLO 1, 2, 7).
- Are able to locate, evaluate and properly utilize the tools and resources appropriate for a mechatronics technician (SLO 4, 7).
- Are able to acquire skills and perform tasks necessary for employment or career enhancement utilizing mechatronics (SLO 1, 2, 3, 4, 6, 7).

C. Short Description: Include the following information and append supporting documents as appropriate:

i. Unique characteristics

This degree program aligns college coursework with level 1 and 2 of the internationally recognized Siemens Mechatronic Systems Certification Program (SMSCP) exam objectives and prepares students to earn these credentials. Students complete hands-on, project-based classes to build upon a foundation of knowledge in electrical, mechanical, fluid power, and control concepts.

ii. Concerns or trends affecting the program

Employers in our region are seeking technicians with the mindset of a problem solver, and this program develops that ability in students. The course framework is structured after the successful German models of technical academies and requires student to complete a series of courses before taking the independent examinations to earn certification.

iii. Significant changes or needs in the next five years

This program will require investment in equipment and supplies annually to ensure that students have access to a real-world practice environment to develop and maintain their skills.

Matrix Spreadsheet – Separate Document

D. Program SLO/Required Course Matrix: Attach to the report this matrix which maps the student learning outcomes to required courses and shows the degree to which a course addresses an outcome. The matrix should reflect required courses and SLOs for the 2017-2018 catalog. When changes are made to the curriculum, Program SLO/Course Matrices are to be updated and submitted to Institutional Research for publication on the college website.

E. Degrees and/or Certificates Offered: List degrees or certificates that are being evaluated for the purposes of this program review.

AAS Technology: Mechatronics

Reporting Elements Template

(Please type your responses in the space available)

F. Niches Served: Describe any niches in the community the program serves, including other academic programs served by program core courses.

This program of study and preparation for internationally recognized Siemens certification at Western Nevada College is the only one of its kind in the Western United States. The opportunity to earn college credit and work towards an AAS degree while studying the objectives covered on the credential exams is unique and prestigious.

2. Quality of Program

A. Evidence of Effectiveness

i. Course Scheduling/Enrollment History Report: *Institutional Research* provides this spreadsheet, which includes course scheduling history and enrollment figures for the most recent four-year period. This report is used to satisfy item #5 of the Curriculum Review Report portion of the program review report.

ii. Summary Data Sheet: *Institutional Research* provides the Summary Data Sheet, a document that provides information on the headcount of students who have declared majors in the program, number of degrees and certificates granted, successful course completion data, student credit hours data, FTE, FTE faculty, workload ratios, and other information that provides a basis for demonstrating program efficiency and effectiveness.

iii. Systematic Assessment: (*This is what is generated from your yearly JOT Form submissions*)

<https://form.jotform.us/71906990133156>

Instructional programs must include evidence that they systematically assess program outcomes and student learning outcomes and that data from assessments are used to make improvements to programs. The final program review report should include the Five-Year Assessment Plan. The report should also indicate the steps taken to make the student learning outcomes public and available to students.

B. Evidence of Satisfaction: Instructional programs may include additional hard data regarding student satisfaction with courses and programs, employer satisfaction studies, etc., as indicators of effectiveness of the program. Results from the Noel-Levitz Student Satisfaction Inventory (2007 and 2009) and the Community College Survey of Student Engagement (2008 and 2012) can be broken out by declared major and are available upon request. Summarized results from Revised and approved May 19, 2017 student course evaluations are another source of satisfaction evidence, and instructors can add one question of their choice to the evaluations. The chair of the PRT should consult with Institutional Research regarding the availability of data.

Reporting Elements Template

(Please type your responses in the space available)

C. Certifications/Licenses: Instructional programs need to explain if there are special certifications or accreditations available to the program and the status of the program relative to these certifications or accreditations.

D. Enrollment Trends: Instructional programs should discuss general student demographics and enrollment trends outlined by the following questions:

a. What student demographic and enrollment trends are most notable?

Students entering this program are those who have completed an introductory series of courses and earned their Manufacturing Technician credential to demonstrate their aptitude and capability to be successful in this technical area. Enrollment in the program is limited to students who have background or experience in industrial technology, or comparable college coursework.

b. What groups constitute the program's main demographic?

Males and females between the ages of 20 and 50.

c. What efforts have been made by the program to recruit students?

This degree program is marketed heavily to recruit technicians working in the field who have not had the opportunity or ability to pursue post-secondary training and skill development in this area.

d. What initiatives have been undertaken to increase FTE?

This degree program is presented through frequent tours and presentations as the appropriate educational path for individuals interested in the areas of robotics, industrial maintenance, advanced manufacturing, fluid power systems, instrumentation, electronics, and process control automation.

e. What initiatives have been undertaken to improve student retention?

WNC promotes and publicizes this prestigious program through articles, reports, press releases, and ads. We trumpet student success to demonstrate the results found through elevated work opportunities and accomplishments in the work place. Students desire to work their way up to this level of study and so we continually engage with employers and connect them to students throughout this program to ensure that we are providing access to career paths.

(Separate Word Document)

E. Need for the Program: Explain the need and basis for determining the need for the program. Objective data, such as alumni studies, employer perceptions, data on transfer or transfer potential, local employment opportunities, and studies commissioned by WNC or NSHE, should be included when possible.

F. Curriculum Review Report: Attach to this report the Curriculum Review Report and the Curriculum Committee Program Evaluation (the committee's response to the Curriculum Review Report).

Reporting Elements Template

(Please type your responses in the space available)

G. Findings and Recommendations: Present the PRT's commendations and recommendations that are the result of the self-study process. If the review recommends any changes to the program, a detailed description of the specific plan of action to implement the recommendations and a timeline for implementation of the plan are required.

The Associate of Applied Science: Technology degree specialization of Mechatronics supports a growing field of electro-mechanical technicians working in a variety of industries including manufacturing, logistics, and distribution. The addition of automation into process and control environments is driving the need for skilled technicians and these positions require an associates degree or industry certification¹. Mechanical engineering technicians also work in the areas of operation, installation, and maintenance of electro-mechanical systems and have similar predictions for job growth².

1. <https://www.bls.gov/ooh/architecture-and-engineering/electro-mechanical-technicians.htm>
2. <https://www.bls.gov/ooh/architecture-and-engineering/mechanical-engineering-technicians.htm>

Associate of Applied Science, Technology: Mechatronics

Student Learning Outcomes Matrix

AAS Technology: Mechatronics Degree

| Outcomes | Upon completing a degree at WNC, students must demonstrate: |
|----------|--|
| 1 | WORKING KNOWLEDGE– Identify, describe, and apply information, theories, methodologies and approaches from the sciences, social sciences, and humanities/arts. |
| 2 | WRITTEN COMMUNICATION – Write effective projects, papers, and reports. |
| 3 | QUANTITATIVE LITERACY – Present accurate calculations and symbolic operations, and explain how such calculations and operations are used in either the specific field of study or in interpreting information in other fields. |
| 4 | INFORMATION LITERACY – Locate, evaluate, and appropriately use information from multiple resources to complete projects, activities, and papers. |
| 5 | DIVERSITY AND SOCIETY – Describe diverse historical and/or contemporary positions on selected democratic values or practices. |
| 6 | CRITICAL THINKING – Integrate knowledge and skills from the study of sciences, mathematics, social sciences, and the humanities/arts to think critically about and develop solutions to contemporary and/or enduring problems. |
| 7 | CAREER PREPARATION – Identify, describe, and apply information in the discipline or career area of their choice sufficient for further study and/ or demonstrate competencies required to succeed in the workplace. |

| Required Courses | | Outcomes | | | | | | |
|------------------|--|----------|---|---|---|---|---|---|
| Course # | Name | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| AIT 101 | Fundamentals of Applied Industrial Technology | X | | X | X | | X | X |
| AIT 250 | Mechatronics: Electrical Components | X | X | X | X | | X | X |
| AIT 251 | Mechatronics: Mechanical Components | X | X | X | X | | X | X |
| AIT 252 | Mechatronics: Pneumatic and Hydraulic | X | X | X | X | | X | X |
| AIT 253 | Mechatronics: Programmable Logic Controllers | X | X | X | X | | X | X |
| AIT 270 | Mechatronics 2: Process Control Technologies | X | X | X | X | | X | X |
| AIT 271 | Mechatronics 2: Intro to Totally Integrated Automation | X | X | X | X | | X | X |
| AIT 272 | Mechatronics 2: Automation Systems | X | X | X | X | | X | X |
| AIT 273 | Mechatronics 2: Motor Control | X | X | X | X | | X | X |
| AIT 274 | Mechatronics 2: Mechanics and Machine Elements | X | X | X | X | | X | X |
| AIT 275 | Mechatronics 2: Manufacturing Processes | X | X | X | X | | X | X |

WNC Total Enrollment in Classes by Location, Instruction Mode, Day of the Week and Time of Day

| GRAND TOTAL | | | | | | | | | | | | | | | | | | | | | | |
|-------------|------------------------------|-----------|-------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|----------|
| CLASS | CLASS TITLE | MODE | DAY | Fall 2011 | Spr 2012 | Sum 2012 | Fall 2012 | Spr 2013 | Sum 2013 | Fall 2013 | Spr 2014 | Sum 2014 | Fall 2014 | Spr 2015 | Sum 2015 | Fall 2015 | Spr 2016 | Sum 2016 | Fall 2016 | Spr 2017 | Sum 2017 | ENROLLED |
| AIT 101 | Fund of Industrial Tech | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| AIT 101 | Fund of Industrial Tech | Online | | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| AIT 101 | Fund of Industrial Tech | In person | | 0 | 0 | 0 | 4 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| AIT 101 | Fund of Industrial Tech | Online | | 0 | 6 | 6 | 0 | 14 | 4 | 0 | 6 | 0 | 0 | 24 | 5 | 35 | 28 | 8 | 54 | 21 | 8 | 219 |
| AIT 102 | Measurement Tools | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 11 |
| AIT 102 | Measurement Tools | Online | | 0 | 3 | 2 | 5 | 8 | 0 | 0 | 7 | 0 | 0 | 7 | 0 | 0 | 7 | 0 | 9 | 12 | 0 | 60 |
| AIT 103 | Intro Machine Tool Tech | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 7 |
| AIT 103 | Intro Machine Tool Tech | Online | | 0 | 2 | 0 | 4 | 3 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 25 |
| AIT 121 | Electrical Control Systems | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 18 |
| AIT 121 | Electrical Control Systems | Online | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 13 | 0 | 0 | 23 |
| AIT 155 | AIT Hands On Lab | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 22 |
| AIT 155 | AIT Hands On Lab | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 8 |
| AIT 155 | AIT Hands On Lab | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 2 | 0 | 5 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| AIT 155 | AIT Hands On Lab | In person | MW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 20 |
| AIT 155 | AIT Hands On Lab | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 |
| AIT 155 | AIT Hands On Lab | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 |
| AIT 155 | AIT Hands On Lab | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 9 | 5 | 0 | 25 |
| AIT 155 | AIT Hands On Lab | In person | TTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 6 |
| AIT 155 | AIT Hands On Lab | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 17 |
| AIT 155 | AIT Hands On Lab | In person | MW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 13 | 0 | 30 |
| AIT 200 | AIT Projects | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 21 |
| AIT 200 | AIT Projects | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 4 | 7 | 0 | 17 |
| AIT 200 | AIT Projects | In person | MW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 11 |
| AIT 200 | AIT Projects | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| AIT 200 | AIT Projects | In person | TTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 12 | 0 | 0 | 26 |
| AIT 200 | AIT Projects | Online | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 14 | 0 | 17 |
| AIT 201 | Pneumatic Power Tech | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 9 |
| AIT 201 | Pneumatic Power Tech | Online | | 0 | 3 | 0 | 4 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| AIT 250 | Mechatronics: Electrical | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 9 |
| DFT 110 | Blueprint Read/Indust | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 17 |
| DFT 110 | Blueprint Read/Indust | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 16 | 0 | 13 | 13 | 0 | 51 |
| DFT 110 | Blueprint Read/Indust | In person | T | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 52 |
| DFT 110 | Blueprint Read/Indust | In person | TH | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 12 | 0 | 81 |
| DFT 110 | Blueprint Read/Indust | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| CADD 100 | Intro to Comp Aid Dft | In person | T | 0 | 0 | 0 | 21 | 17 | 0 | 17 | 18 | 0 | 16 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 109 |
| CADD 100 | Intro to Comp Aid Dft | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 18 |
| CADD 100 | Intro to Comp Aid Dft | In person | W | 17 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| CADD 105 | Inter Computer-Aided Dft | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 8 |
| CADD 105 | Inter Computer-Aided Dft | In person | W | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| CADD 120 | Architect Drafting I | In person | | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| CADD 200 | Adv. Computer Aided Dft | In person | | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| CADD 200 | Adv. Computer Aided Dft | In person | W | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| CADD 225 | Architectural Cad I | In person | | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| CADD 245 | Solid Modeling and Design | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 10 |
| CADD 245 | Solid Modeling and Design | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 11 | 0 | 22 |
| ET 104 | Fabrication & Soldering Tech | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 11 |
| ET 104 | Fabrication & Soldering Tech | In person | MW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 |
| ET 117 | Computer forensics | Online | | 0 | 29 | 12 | 0 | 24 | 0 | 0 | 20 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 86 |
| ET 131 | Dc for Electronics | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |

| | | | | | | | | | | | | | | | | | | | | |
|----------|------------------------------|--------------|----|----|----|----|----|---|----|----|---|----|----|---|----|----|----|----|----|-----|
| ET 131 | Dc for Electronics | Online | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| ET 131 | Dc for Electronics | Online | 14 | 0 | 0 | 26 | 0 | 0 | 28 | 0 | 0 | 19 | 0 | 0 | 18 | 12 | 0 | 11 | 0 | 128 |
| ET 132 | Ac for Electronics | In person W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| ET 132 | Ac for Electronics | Online | 0 | 9 | 0 | 0 | 23 | 0 | 0 | 13 | 0 | 0 | 12 | 0 | 15 | 6 | 0 | 11 | 0 | 89 |
| ET 155 | Home Tech Convergence | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| ET 155 | Home Tech Convergence | In person F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| ET 155 | Home Tech Convergence | In person T | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| ET 155 | Home Tech Convergence | In person W | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| ET 198 | Spec Topics: Electronics | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| ET 200 | Electronics Projects | In person | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| ET 200 | Electronics Projects | In person M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| ET 200 | Electronics Projects | In person TH | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| ET 200 | Electronics Projects | Online | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| ENGR 100 | Intro to Engin Design | In person M | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| ENGR 100 | Intro to Engin Design | In person M | 23 | 23 | 0 | 0 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 |
| ENGR 100 | Intro to Engin Design | In person M | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| ENGR 100 | Intro to Engineering Design | In person MW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 16 | 13 | 0 | 42 |
| ENGR 100 | Intro to Engin Design | In person T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| ENGR 100 | Intro to Engineering Design | In person T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 20 | 0 | 30 | 24 | 0 | 20 | 15 | 131 |
| ENGR 100 | Intro to Engin Design | In person W | 0 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| ENRG 110 | Intro to Alternative Energy | In person T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 8 |
| ENRG 110 | Intro to Altrntve | In person TH | 0 | 11 | 4 | 10 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 |
| ET 104 | Fabrication & Soldering Tech | In person M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 11 |
| ET 104 | Fabrication & Soldering Tech | In person MW | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 |
| ET 117 | Computer forensics | Online | 0 | 29 | 12 | 0 | 24 | 0 | 0 | 20 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 86 |
| ET 131 | Dc for Electronics | In person W | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| ET 131 | Dc for Electronics | Online | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| ET 131 | Dc for Electronics | Online | 14 | 0 | 0 | 26 | 0 | 0 | 28 | 0 | 0 | 19 | 0 | 0 | 18 | 12 | 0 | 11 | 0 | 128 |
| ET 132 | Ac for Electronics | In person W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| ET 132 | Ac for Electronics | Online | 0 | 9 | 0 | 0 | 23 | 0 | 0 | 13 | 0 | 0 | 12 | 0 | 15 | 6 | 0 | 11 | 0 | 89 |
| ET 155 | Home Tech Convergence | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| ET 155 | Home Tech Convergence | In person F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| ET 155 | Home Tech Convergence | In person T | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| ET 155 | Home Tech Convergence | In person W | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| ET 198 | Spec Topics: Electronics | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| ET 200 | Electronics Projects | In person | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| ET 200 | Electronics Projects | In person M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| ET 200 | Electronics Projects | In person TH | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| ET 200 | Electronics Projects | Online | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| ELM 143 | Wiring Techniques | In person T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 |
| ELM 143 | Wiring Techniques | In person T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 6 |
| ELM 143 | Wiring Techniques | In person TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| MT 115 | Applied PLC I | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| MT 115 | Applied PLC I | In person M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 9 | 0 | 18 |
| MT 115 | Applied PLC I | In person M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| MT 160 | Hydraulic Power | In person | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 6 |

WNC Course Success Rates by Academic Year (fall, spring, and summer)

(Total students with C- and above, P, or S grades/total enrolled after removing audits, incompletes and missing grades. Must have at least a total of 10 students enrolled.)

| Division | Subject | Catalog No | Title | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | Total_Enrolled |
|-----------------------|---------|------------|------------------------------|---------|---------|---------|---------|---------|----------------|
| Career & Technical Ed | AIT | 101 | Fund of Industrial Tech | 81.8 | 69.2 | 59.5 | 71.8 | 61.7 | 237 |
| Career & Technical Ed | AIT | 102 | Measurement Tools | 84.6 | 80.0 | 54.5 | 54.5 | 50.0 | 65 |
| Career & Technical Ed | AIT | 103 | Intro Machine Tool Tech | 71.4 | 100.0 | | 80.0 | 41.7 | 30 |
| Career & Technical Ed | AIT | 121 | Electrical Control Systems | | | 80.0 | 77.8 | 58.3 | 40 |
| Career & Technical Ed | AIT | 155 | AIT Hands On Lab | | 87.5 | 90.9 | 78.0 | 86.8 | 146 |
| Career & Technical Ed | AIT | 200 | AIT Projects | | | | 84.4 | 64.0 | 95 |
| Career & Technical Ed | AIT | 201 | Pneumatic Power Tech | 100.0 | 33.3 | 100.0 | 83.3 | | 16 |
| Career & Technical Ed | CADD | 100 | Intro to Comp Aid Dft | 70.5 | 62.5 | 64.7 | 85.0 | 76.5 | 138 |
| Career & Technical Ed | CADD | 105 | Inter Computer-Aided Dft | 92.3 | 100.0 | | 37.5 | | 22 |
| Career & Technical Ed | CADD | 245 | Solid Modeling and Design | | | | 89.5 | 100.0 | 29 |
| Career & Technical Ed | DFT | 110 | Blueprint Read/Indust | 75.0 | 80.0 | 87.0 | 90.6 | 84.6 | 196 |
| Career & Technical Ed | ELM | 143 | Wiring Techniques | | | 100.0 | 100.0 | 60.0 | 14 |
| Career & Technical Ed | ENRG | 110 | Intro to Altrntve | 62.5 | | | 100.0 | 75.0 | 24 |
| Career & Technical Ed | ET | 104 | Fabrication & Soldering Tech | | | 100.0 | 87.5 | 87.5 | 19 |
| Career & Technical Ed | ET | 117 | Computer forensics | 58.3 | 65.0 | 100.0 | | | 45 |
| Career & Technical Ed | ET | 131 | Dc for Electronics | 76.9 | 52.0 | 84.2 | 76.7 | 63.6 | 136 |
| Career & Technical Ed | ET | 132 | Ac for Electronics | 69.6 | 68.4 | 91.7 | 71.4 | 63.6 | 86 |
| Career & Technical Ed | ET | 155 | Home Tech Convergence | | 76.5 | 100.0 | | | 19 |
| Career & Technical Ed | ET | 200 | Electronics Projects | | 100.0 | 100.0 | | | 18 |
| Career & Technical Ed | MT | 115 | Applied PLC I | | 80.0 | 100.0 | 88.9 | 88.9 | 24 |

WNC Students Enrolled by Course and Academic Year (fall, spring, summer)

| Division | Subject | Catalog No | Title | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|-----------------------|---------|------------|------------------------------|---------|---------|---------|---------|---------|
| Career & Technical Ed | AIT | 101 | Fund of Industrial Tech | 22 | 26 | 37 | 71 | 83 |
| Career & Technical Ed | AIT | 102 | Measurement Tools | 13 | 10 | 11 | 11 | 21 |
| Career & Technical Ed | AIT | 103 | Intro Machine Tool Tech | 7 | 6 | 0 | 5 | 12 |
| Career & Technical Ed | AIT | 121 | Electrical Control Systems | 0 | 0 | 10 | 18 | 13 |
| Career & Technical Ed | AIT | 155 | AIT Hands On Lab | 0 | 8 | 11 | 59 | 69 |
| Career & Technical Ed | AIT | 200 | AIT Projects | 0 | 0 | 0 | 46 | 51 |
| Career & Technical Ed | AIT | 201 | Pneumatic Power Tech | 5 | 3 | 2 | 7 | 0 |
| Career & Technical Ed | AIT | 250 | Mechatronics: Electrical | 0 | 0 | 0 | 0 | 9 |
| Career & Technical Ed | CADD | 100 | Intro to Comp Aid Dft | 45 | 41 | 17 | 20 | 18 |
| Career & Technical Ed | CADD | 105 | Inter Computer-Aided Dft | 15 | 1 | 0 | 8 | 0 |
| Career & Technical Ed | CADD | 120 | Architect Drafting I | 0 | 1 | 0 | 0 | 0 |
| Career & Technical Ed | CADD | 200 | Adv. Computer Aided Dft | 7 | 0 | 0 | 0 | 0 |
| Career & Technical Ed | CADD | 245 | Solid Modeling and Design | 0 | 0 | 0 | 21 | 11 |
| Career & Technical Ed | DFT | 110 | Blueprint Read/Indust | 20 | 25 | 46 | 54 | 52 |
| Career & Technical Ed | ET | 104 | Fabrication & Soldering Tech | 0 | 0 | 3 | 8 | 8 |
| Career & Technical Ed | ET | 117 | Computer forensics | 24 | 20 | 1 | 0 | 0 |
| Career & Technical Ed | ET | 131 | Dc for Electronics | 26 | 50 | 19 | 30 | 11 |
| Career & Technical Ed | ET | 132 | Ac for Electronics | 23 | 19 | 12 | 21 | 11 |
| Career & Technical Ed | ET | 155 | Home Tech Convergence | 0 | 17 | 2 | 0 | 0 |
| Career & Technical Ed | ET | 198 | Spec Topics: Electronics | 0 | 1 | 0 | 0 | 0 |
| Career & Technical Ed | ET | 200 | Electronics Projects | 0 | 9 | 9 | 0 | 0 |
| Career & Technical Ed | ELM | 143 | Wiring Techniques | 0 | 0 | 3 | 6 | 5 |
| Career & Technical Ed | ENRG | 110 | Intro to Altrntve | 16 | 0 | 0 | 4 | 4 |
| Career & Technical Ed | MT | 115 | Applied PLC I | 0 | 5 | 1 | 9 | 9 |
| Career & Technical Ed | MT | 160 | Hydraulic Power | 0 | 0 | 2 | 4 | 0 |

WNC Degrees and Certificates of Achievement by Fiscal Year

| Degree | Description | CIP Code | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|--------|-------------|----------|------|------|------|------|------|------|------|------|------|------|
|--------|-------------|----------|------|------|------|------|------|------|------|------|------|------|

WNC Declared Majors Enrolled as of October 15 or March 15 by Semester

[illegible]

Reporting Elements Template
(Please type your responses in the space available)

Technology Program:

Welding

1. Program Description

A. College and Program Mission: The college mission and program mission are presented side-by-side in a table to show how the college and program missions align. The program mission states the purpose of the program; names its primary functions, activities and stakeholders; Supports the college mission; and is distinctive.

College Mission

Western Nevada College inspires success in our community through opportunities that cultivate creativity, intellectual growth and technological excellence, in an environment that nurtures individual potential and respects differences.

Program Mission (*What is the mission of your program?*) *These can also be found on MyWNC*
The mission of the Associate of Applied Science Degree in Welding Technology is to provide employment-related knowledge and skills necessary to succeed in the welding field.

B. College and Program Goals: The College Strategic Goals and the program goals and related outcomes are presented side-by-side in a table to show how they align. Also indicate any linkage to ISLOs (Institutional Student Learning Outcomes) by indicating this alignment with the following shorthand, in parenthesis, next to the aligned program outcome (ISLO x , where x indicates the number of the ISLO).

College Goals

- Improve student success in program completion and graduation rates
- Ensure institutional excellence in teaching, programs and services
- Embrace our college's many communities and respond to their diverse needs.

Reporting Elements Template

(Please type your responses in the space available)

Program Goals and Outcomes (*What are the Goals and Outcomes of your program?*)

- Goal: Evaluate the validity/viability of the AAS in Welding Technology Degree Program.
Outcome: Assess student learning outcomes for the AAS and Certificate of Achievement in Welding Technology and make changes as needed.
- Goal: Remain current with business and industry standards, requirements, and needs.
Outcome: Continual contact with business and industry (Technical Skills Advisory Committee).
- Goal: Continual improvement of laboratory facilities on all campuses.
Outcome: Continual contact with business and industry. Inspections and changes as needed to comply with safety standards/requirements and equipment needs.

Goal: Continue to meet the rural areas needs for educating/preparing students for employment in the welding field.

Outcome: Continual contact with rural areas to ensure they have the support and equipment necessary.

C. Short Description: Include the following information and append supporting documents as appropriate:

i. Unique characteristics

The welding program has many unique characteristics. Welding certifications, accelerated training programs, welding courses offered on multiple campuses, tech prep articulations with local high schools, on-site training programs, community events such as secondary/post-secondary welding competitions. WNC is the only public American Welding Society Accredited Testing Facility in Nevada.

ii. Concerns or trends affecting the program

The need for a skilled workforce. There will always be a need for skilled welders. Increased enrollment. All classes are at or near capacity.

iii. Significant changes or needs in the next five years

Continue to change to meet the needs of business, industry, and the community. Industry demands a well-rounded employee. More academic skills will be incorporated and emphasized in the welding courses.

Matrix Spreadsheet – Separate Document

D. Program SLO/Required Course Matrix: Attach to the report this matrix which maps the student learning outcomes to required courses and shows the degree to which a course addresses an outcome. The matrix should reflect required courses and SLOs for the 2017-2018 catalog. When changes are made to the curriculum, Program SLO/Course Matrices are to be updated and submitted to Institutional Research for publication on the college website.

Reporting Elements Template

(Please type your responses in the space available)

E. Degrees and/or Certificates Offered: List degrees or certificates that are being evaluated for the purposes of this program review.

AAS in Welding Technology

Certificate of Achievement in Welding Technology

F. Niches Served: Describe any niches in the community the program serves, including other academic programs served by program core courses.

Welding will always be a skill that is in demand. Training opportunities are available for an endless range of people including displaced workers and military veterans. Some of the courses can be used as electives for other degrees.

2. Quality of Program

A. Evidence of Effectiveness

i. Course Scheduling/Enrollment History Report: *Institutional Research* provides this spreadsheet, which includes course scheduling history and enrollment figures for the most recent four-year period. This report is used to satisfy item #5 of the Curriculum Review Report portion of the program review report.

ii. Summary Data Sheet: *Institutional Research* provides the Summary Data Sheet, a document that provides information on the headcount of students who have declared majors in the program, number of degrees and certificates granted, successful course completion data, student credit hours data, FTE, FTE faculty, workload ratios, and other information that provides a basis for demonstrating program efficiency and effectiveness.

iii. Systematic Assessment: (*This is what is generated from your yearly JOT Form submissions*)

<https://form.jotform.us/71906990133156>

Instructional programs must include evidence that they systematically assess program outcomes and student learning outcomes and that data from assessments are used to make improvements to programs. The final program review report should include the Five-Year Assessment Plan. The report should also indicate the steps taken to make the student learning outcomes public and available to students.

B. Evidence of Satisfaction: Instructional programs may include additional hard data regarding student satisfaction with courses and programs, employer satisfaction studies, etc., as indicators of effectiveness of the program. Results from the Noel-Levitz Student Satisfaction Inventory (2007 and 2009) and the Community College Survey of Student Engagement (2008 and 2012) can be broken out by declared major and are available upon request. Summarized results from Revised and approved May 19, 2017 student course evaluations are another source of satisfaction

Reporting Elements Template

(Please type your responses in the space available)

evidence, and instructors can add one question of their choice to the evaluations. The chair of the PRT should consult with Institutional Research regarding the availability of data.

C. Certifications/Licenses: Instructional programs need to explain if there are special certifications or accreditations available to the program and the status of the program relative to these certifications or accreditations.

D. Enrollment Trends: Instructional programs should discuss general student demographics and enrollment trends outlined by the following questions:

a. What student demographic and enrollment trends are most notable?

Any student who meets the WNC acceptance criteria and completes the application and registration can enroll in welding classes. We serve students of all ages, genders, and ethnic backgrounds.

b. What groups constitute the program's main demographic?

The main demographic can be broken down into three areas: degree seeking students, non-degree seeking students seeking certification and/or employment, or non-degree seeking students taking courses for self-interest.

c. What efforts have been made by the program to recruit students?

Visits to high schools, establishing tech prep articulations with local high schools, and serving on committees that develop high school welding and metal working standards. Faculty also attend special events such as career and job fairs, college days, and other college and community activities.

d. What initiatives have been undertaken to increase FTE?

Participating in college, high school, and community events. Several marketing campaigns have been used which include distributing fliers and filming informative video segments which are aired on television. We offer accelerated and traditional training programs. The welding shop is open Monday thru Saturday, mornings, afternoons, and evenings.

e. What initiatives have been undertaken to improve student retention?

Student retention is the result of having a successful program. Students are encouraged to declare majors, and are advised by instructors on degree requirements and receive recommendations on which courses to take. Non-degree seeking students are instructed on the certification process and career opportunities. We have very high student retention.

(Separate Word Document)

E. Need for the Program: Explain the need and basis for determining the need for the program. Objective data, such as alumni studies, employer perceptions, data on transfer or transfer potential, local employment opportunities, and studies commissioned by W NC or NSHE, should be included when possible.

Reporting Elements Template

(Please type your responses in the space available)

F. Curriculum Review Report: Attach to this report the Curriculum Review Report and the Curriculum Committee Program Evaluation (the committee's response to the Curriculum Review Report).

G. Findings and Recommendations: Present the PRT's commendations and recommendations that are the result of the self-study process. If the review recommends any changes to the program, a detailed description of the specific plan of action to implement the recommendations and a timeline for implementation of the plan are required.

E. Need for the Program

There is no question that there is a need for the welding program. Welding will always be a skill that is in demand. Anything made of metal relies on welding in its manufacturing or repair.

An AWS Job Outlook for Welders article said the following:

¹¹Manual welders, however, especially those with a wide variety of skills, will increasingly be needed for sophisticated fabrication tasks and repair work that do not lend themselves to automation."

In northern Nevada, The Nevada Occupational Employment and Projections are expecting over a 3% growth rate. Nationwide, The U.S Bureau of Labor Statistics is projecting an increase of 15% (50,700 jobs) by 2020. The following is taken from an economic news release:

"In terms of typical on-the job training, occupations that typically require apprenticeships are projected to grow the fastest (22.5%)

¹¹Over the 2010-20 decade, 54.8 million total job openings are expected. While growth will lead to many openings, more than half- 61.6 % -will come from the need to replace workers who retire or otherwise permanently leave an occupation. In 4 out of 5 occupations, openings due to replacement needs exceed the number due to growth. Replacement needs are expected in every occupation, even those that are declining."

¹¹Over two-thirds of all job openings are expected to be in occupations that typically do not need postsecondary education for entry. Eighteen of the 30 occupations with the largest number of projected total job openings are classified as typically needing short-term on-the-job training."

The same article also listed junior colleges, colleges, universities, and professional schools as one of the top 20 industries with the largest projected wage and salary employment growth.

The Welding Technology Program at Western Nevada College is needed to train these welders.

AAS in Welding Technology

Student Learning Outcomes Matrix

Upon completing the AAS in Welding Technology, students will be able to:

Outcomes*

- | | |
|----|--|
| 1 | Demonstrate knowledge of subject matter appropriate to the AAS in Welding Technology |
| 2 | Acquire skills and perform tasks necessary for employment or career enhancement |
| 3 | Present themselves effectively to a potential employer |
| 4 | Utilize appropriate resources to remain current in the welding field |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |

Required Courses

Outcomes

| Course # | Name | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-----------|----------------------------|---|---|---|---|---|---|---|---|---|----|
| DFT 100 | Basic Drafting Principles | 2 | 2 | 2 | 3 | | | | | | |
| WELD 211 | Welding II | 3 | 3 | 3 | 3 | | | | | | |
| WELD 212B | Welding I Practice | 2 | 2 | 2 | 2 | | | | | | |
| WELD 221 | Welding II | 3 | 3 | 3 | 3 | | | | | | |
| WELD 222B | Welding II Practice | 2 | 2 | 2 | 2 | | | | | | |
| WELD 231 | Welding III | 3 | 3 | 3 | 3 | | | | | | |
| WELD 232B | Welding III Practice | 2 | 2 | 2 | 2 | | | | | | |
| WELD 241 | Welding IV | 3 | 3 | 3 | 3 | | | | | | |
| WELD 242B | Welding IV Practice | 2 | 2 | 2 | 2 | | | | | | |
| WELD 250B | Welding Certification Prep | 3 | 3 | 3 | 3 | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Assign a value to which each outcome is represented in each required class: 1 = slightly, 2 = moderately, 3 = significantly

* Outcomes must be measurable

WNC Total Enrollment in Classes by Location, Instruction Mode, Day of the Week and Time of Day

| | | | | | | | | | | | | | | | | | | | | | | GRAND TOTAL |
|----------|--------------------|-----------|-------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|----------------|
| CLASS | CLASS TITLE | MODE | DAY | Fall 2011 | Spr 2012 | Sum 2012 | Fall 2012 | Spr 2013 | Sum 2013 | Fall 2013 | Spr 2014 | Sum 2014 | Fall 2014 | Spr 2015 | Sum 2015 | Fall 2015 | Spr 2016 | Sum 2016 | Fall 2016 | Spr 2017 | Sum 2017 | ENROLLED |
| WELD 211 | Welding I | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| WELD 211 | Welding I | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| WELD 211 | Welding I | In person | MTTHF | 0 | 0 | 0 | 0 | 6 | 0 | 9 | 13 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 |
| WELD 211 | Welding I | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 9 | 0 | 7 | 9 | 0 | 33 |
| WELD 211 | Welding I | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| WELD 211 | Welding I | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| WELD 211 | Welding I | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 15 | 0 | 16 | 16 | 0 | 62 |
| WELD 211 | Welding I | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 12 | 0 | 0 | 0 | 0 | 26 |
| WELD 211 | Welding I | In person | T | 17 | 17 | 0 | 15 | 15 | 0 | 15 | 14 | 0 | 13 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 112 |
| WELD 211 | Welding I | In person | T | 18 | 15 | 0 | 16 | 15 | 0 | 14 | 15 | 0 | 9 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 116 |
| WELD 211 | Welding I | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| WELD 211 | Welding I | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| WELD 211 | Welding I | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| WELD 211 | Welding I | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| WELD 211 | Welding I | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| WELD 211 | Welding I | In person | MTTHF | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| WELD 211 | Welding I | In person | T | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| WELD 211 | Welding I | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 3 | 7 | 0 | 7 | 6 | 0 | 28 |
| WELD 212 | Welding I Practice | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| WELD 212 | Welding I Practice | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 9 | 0 | 7 | 9 | 0 | 33 |
| WELD 212 | Welding I Practice | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| WELD 212 | Welding I Practice | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| WELD 212 | Welding I Practice | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 14 | 0 | 14 | 13 | 0 | 54 |
| WELD 212 | Welding I Practice | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| WELD 212 | Welding I Practice | In person | W | 11 | 12 | 0 | 15 | 12 | 0 | 9 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 67 |
| WELD 212 | Welding I Practice | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| WELD 212 | Welding I Practice | In person | W | 15 | 9 | 0 | 14 | 14 | 0 | 14 | 12 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 83 |
| WELD 212 | Welding I Practice | In person | M | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| WELD 212 | Welding I Practice | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| WELD 212 | Welding I Practice | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| WELD 212 | Welding I Practice | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| WELD 212 | Welding I Practice | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 4 | 7 | 0 | 8 | 6 | 0 | 30 |
| WELD 221 | Welding II | In person | M | 13 | 18 | 0 | 15 | 15 | 0 | 15 | 15 | 0 | 15 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 121 |
| WELD 221 | Welding II | In person | MTTHF | 0 | 0 | 0 | 0 | 7 | 0 | 9 | 11 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 |
| WELD 221 | Welding II | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 | 7 | 9 | 0 | 34 |
| WELD 221 | Welding II | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| WELD 221 | Welding II | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| WELD 221 | Welding II | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 16 | 0 | 10 | 10 | 0 | 51 |

| | | | | | | | | | | | | | | | | | | | | | |
|----------|----------------------|-----------|-------|---|----|---|----|----|---|----|----|---|----|----|---|----|----|---|----|----|-----|
| WELD 221 | Welding II | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| WELD 221 | Welding II | In person | MTTHF | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| WELD 221 | Welding II | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| WELD 221 | Welding II | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 4 | 6 | 0 | 7 | 5 | 0 | 29 |
| WELD 222 | Welding II Practice | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| WELD 222 | Welding II Practice | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 9 | 0 | 6 | 9 | 0 | 33 |
| WELD 222 | Welding II Practice | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| WELD 222 | Welding II Practice | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| WELD 222 | Welding II Practice | In person | W | 0 | 18 | 0 | 10 | 15 | 0 | 12 | 15 | 0 | 14 | 9 | 0 | 7 | 11 | 0 | 7 | 5 | 123 |
| WELD 222 | Welding II Practice | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| WELD 222 | Welding II Practice | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| WELD 222 | Welding II Practice | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 4 | 6 | 0 | 7 | 5 | 29 |
| WELD 224 | Welding Projects | In person | | 0 | 0 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 13 |
| WELD 224 | Welding Projects | In person | M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| WELD 224 | Welding Projects | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| WELD 224 | Welding Projects | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 15 | 0 | 12 | 10 | 46 |
| WELD 224 | Welding Projects | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| WELD 224 | Welding Projects | In person | TH | 9 | 10 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| WELD 224 | Welding Projects | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| WELD 224 | Welding Projects | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 5 | 0 | 6 | 6 | 24 |
| WELD 224 | Welding Projects | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 8 | 6 | 0 | 11 | 11 | 48 |
| WELD 231 | Welding III | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 8 | 0 | 10 | 6 | 34 |
| WELD 231 | Welding III | In person | MTTHF | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 11 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 |
| WELD 231 | Welding III | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 6 | 1 | 14 |
| WELD 231 | Welding III | In person | TH | 8 | 9 | 0 | 8 | 12 | 0 | 9 | 5 | 0 | 7 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 68 |
| WELD 231 | Welding III | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| WELD 231 | Welding III | In person | MTTHF | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| WELD 231 | Welding III | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 4 | 2 | 0 | 3 | 6 | 25 |
| WELD 232 | Welding III Practice | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 3 | 0 | 8 | 5 | 23 |
| WELD 232 | Welding III Practice | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| WELD 232 | Welding III Practice | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 6 | 1 | 14 |
| WELD 232 | Welding III Practice | In person | TH | 7 | 4 | 0 | 7 | 6 | 0 | 7 | 4 | 0 | 7 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 48 |
| WELD 232 | Welding III Practice | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| WELD 232 | Welding III Practice | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 4 | 2 | 0 | 3 | 6 | 24 |
| WELD 241 | Welding IV | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 |
| WELD 241 | Welding IV | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 8 | 0 | 0 | 7 | 22 |
| WELD 241 | Welding IV | In person | MTTHF | 0 | 0 | 0 | 0 | 2 | 0 | 9 | 10 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 |
| WELD 241 | Welding IV | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 0 | 6 | 1 | 14 |

| | | | | | | | | | | | | | | | | | | | | | |
|----------|-------------------------|-----------|-------|----|----|---|----|----|---|----|----|---|----|----|---|----|----|---|----|----|-----|
| WELD 241 | Welding IV | In person | TH | 1 | 4 | 0 | 8 | 5 | 0 | 6 | 5 | 0 | 3 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 39 |
| WELD 241 | Welding IV | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WELD 241 | Welding IV | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 4 | 3 | 0 | 3 | 6 | 22 |
| WELD 242 | Welding IV Practice | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 6 | 0 | 0 | 7 | 18 |
| WELD 242 | Welding IV Practice | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| WELD 242 | Welding IV Practice | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 0 | 6 | 1 | 14 |
| WELD 242 | Welding IV Practice | In person | TH | 1 | 4 | 0 | 7 | 3 | 0 | 4 | 5 | 0 | 5 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 38 |
| WELD 242 | Welding IV Practice | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| WELD 242 | Welding IV Practice | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WELD 242 | Welding IV Practice | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 4 | 3 | 0 | 3 | 6 | 22 |
| WELD 250 | Weld Certification Prep | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| WELD 250 | Weld Certification Prep | In person | F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 10 |
| WELD 250 | Weld Certification Prep | In person | MTTH | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| WELD 250 | Weld Certification Prep | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 12 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 |
| WELD 250 | Weld Certification Prep | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 15 | 0 | 12 | 10 | 47 |
| WELD 250 | Weld Certification Prep | In person | S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 7 | 0 | 1 | 0 | 14 |
| WELD 250 | Weld Certification Prep | In person | TH | 1 | 5 | 0 | 3 | 0 | 0 | 1 | 5 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| WELD 250 | Weld Certification Prep | In person | TH | 4 | 5 | 0 | 3 | 12 | 0 | 4 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 |
| WELD 250 | Weld Certification Prep | In person | TH | 0 | 0 | 0 | 2 | 2 | 0 | 1 | 3 | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| WELD 250 | Weld Certification Prep | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| WELD 250 | Weld Certification Prep | In person | W | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| WELD 250 | Weld Certification Prep | In person | W | 0 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| WELD 250 | Weld Certification Prep | In person | WTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 9 | 7 | 0 | 11 | 12 | 52 |
| WELD 290 | Internship in Welding | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| WELD 290 | Internship in Welding | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| DFT 110 | Blueprint Read/Indust | In person | MTTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 5 | 0 | 0 | 0 | 0 | 17 |
| DFT 110 | Blueprint Read/Indust | In person | MTWTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 16 | 0 | 13 | 13 | 51 |
| DFT 110 | Blueprint Read/Indust | In person | T | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 14 | 0 | 52 |
| DFT 110 | Blueprint Read/Indust | In person | TH | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 24 | 0 | 0 | 12 | 81 |
| DFT 110 | Blueprint Read/Indust | In person | TWTHF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| AIT 101 | Fund of Industrial Tech | In person | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| AIT 101 | Fund of Industrial Tech | Online | | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| AIT 101 | Fund of Industrial Tech | In person | | 0 | 0 | 0 | 4 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| AIT 101 | Fund of Industrial Tech | Online | | 0 | 6 | 6 | 0 | 14 | 4 | 0 | 6 | 0 | 0 | 24 | 5 | 35 | 28 | 8 | 54 | 21 | 219 |
| ELM 143 | Wiring Techniques | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 |
| ELM 143 | Wiring Techniques | In person | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 6 |
| ELM 143 | Wiring Techniques | In person | TH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| ET 131 | Dc for Electronics | In person | W | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| ET 131 | Dc for Electronics | Online | | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| ET 131 | Dc for Electronics | Online | | 14 | 0 | 0 | 26 | 0 | 0 | 28 | 0 | 0 | 19 | 0 | 0 | 18 | 12 | 0 | 11 | 0 | 128 |

WNC Course Success Rates by Academic Year (fall, spring, and summer)

(Total students with C- and above, P, or S grades/total enrolled after removing audits, incompletes and missing grades. Must have at least a total of 10 students enrolled.)

| Division | Subject | Catalog No Title | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | Total_Enrolled |
|-----------------------|---------|-----------------------------|---------|---------|---------|---------|---------|----------------|
| Career & Technical Ed | DFT | 110 Blueprint Read/Indust | 75.0 | 80.0 | 87.0 | 90.6 | 84.6 | 196 |
| Career & Technical Ed | AIT | 101 Fund of Industrial Tech | 81.8 | 69.2 | 59.5 | 71.8 | 61.7 | 237 |
| Career & Technical Ed | ELM | 143 Wiring Techniques | | | 100.0 | 100.0 | 60.0 | 14 |
| Career & Technical Ed | ET | 131 Dc for Electronics | 76.9 | 52.0 | 84.2 | 76.7 | 63.6 | 136 |
| Career & Technical Ed | MTT | 105 Machine Shop I | 81.8 | 83.1 | 89.8 | 87.5 | 75.0 | 237 |

WNC Students Enrolled by Course and Academic Year (fall, spring, summer)

| Division | Subject | Catalog No | Title | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
|-----------------------|---------|------------|-------------------------|---------|---------|---------|---------|---------|
| Career & Technical Ed | AIT | 101 | Fund of Industrial Tech | 22 | 26 | 37 | 71 | 83 |
| Career & Technical Ed | DFT | 110 | Blueprint Read/Indust | 20 | 25 | 46 | 54 | 52 |
| Career & Technical Ed | ELM | 143 | Wiring Techniques | 0 | 0 | 3 | 6 | 5 |
| Career & Technical Ed | ET | 131 | Dc for Electronics | 26 | 50 | 19 | 30 | 11 |
| Career & Technical Ed | MTT | 105 | Machine Shop I | 55 | 59 | 59 | 33 | 32 |
| Career & Technical Ed | WELD | 211 | Welding I | 124 | 141 | 111 | 88 | 63 |
| Career & Technical Ed | WELD | 212 | Welding I Practice | 70 | 91 | 85 | 60 | 58 |
| Career & Technical Ed | WELD | 221 | Welding II | 68 | 74 | 77 | 64 | 49 |
| Career & Technical Ed | WELD | 222 | Welding II Practice | 28 | 52 | 62 | 51 | 40 |
| Career & Technical Ed | WELD | 224 | Welding Projects | 11 | 10 | 34 | 51 | 57 |
| Career & Technical Ed | WELD | 231 | Welding III | 44 | 40 | 55 | 31 | 32 |
| Career & Technical Ed | WELD | 232 | Welding III Practice | 13 | 22 | 45 | 23 | 29 |
| Career & Technical Ed | WELD | 241 | Welding IV | 15 | 30 | 30 | 29 | 27 |
| Career & Technical Ed | WELD | 242 | Welding IV Practice | 10 | 9 | 21 | 25 | 26 |
| Career & Technical Ed | WELD | 250 | Weld Certification Prep | 29 | 44 | 57 | 54 | 56 |
| Career & Technical Ed | WELD | 290 | Internship in Welding | 0 | 0 | 0 | 0 | 2 |

WNC Degrees and Certificates of Achievement by Fiscal Year

| Degree | Description | CIP Code | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|--------|----------------------|----------|------|------|------|------|------|------|------|------|------|------|
| AAS | Technology - Welding | 48.0508 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 3 | 6 |

WNC Declared Majors Enrolled as of October 15 or March 15 by Semester

| Division | Degree | Declared Major | Fall 2013 | Spr 2014 | Fall 2014 | Spr 2015 | Fall 2015 | Spr 2016 | Fall 2016 | Spr 2017 | Fall 2017 |
|-----------------------|--------|--------------------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|
| Career & Technical Ed | AAS | Welding Technology | 27 | 25 | 11 | 9 | 5 | 5 | 1 | 2 | 1 |