

# Apprenticeship PUR Self Study 2022-23

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## Apprenticeship:

Date: 09-15-2023

- Apprenticeship 2022-23 PUR Self-Study

Sorted by: Program

**SI Section Templates:** 1.A. Program or Unit Description, 1.B. Program or Unit Mission, 1.C. Program Learning Outcomes, 2.A. Progress on Previous Findings and Recommendations, 2.B. Workforce Needs (AAS degrees and certificates; allied health programs only), 2.C. Accessibility and Cost of Instructional Materials, 2.D. Catalog Review, 3.B. Evidence of Program Learning Outcomes Assessment, 3.C. General Education Outcomes Assessment (if applicable), 3A. Curriculum Mapping, 4.A. FTE and Section Count, 4.B. Course Fill Rates and Unsuccessful Enrollment Attempts, 4.C. Student Demographics: Ethnicity, Gender, Credit Load, Student Status, and Age Range, 5.A. Course Completion Rates, 5.B. Graduation and Transfer, 6. A. Faculty Achievement, 6.B. FT/PT Faculty and Student Credit Hours Taught, 6.C. Support Staff, 6.D. Facilities and Technology, 7.A. Five-Year Plan, 8.A. Resource Requests, Academic Standards and Assessment Committee Findings and Recommendations, Dean's Findings and Recommendations, Vice President of Academic Affairs' Findings and Recommendations

## Apprenticeship

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### 1.A. Program or Unit Description

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**Briefly describe (1 paragraph) the program/unit, including but not limited to the following: academic division that the program/unit belongs to, the academic area(s) represented, degrees/certificates offered, average student enrollment, number of full-time faculty, type of curriculum or pedagogical approaches, and any other pertinent aspect of the program/unit.**

#### DESCRIPTION OF PROGRAM/UNIT

The TMCC –Building Trades Apprenticeship program provides training in skilled workforce areas that constantly require changes as the knowledge and technology job related skills are modified. The various apprenticeship programs are influenced by local, regional and national code provisions along with specific municipal and industry license requirements.

The local and national area trade unions provide a professional educational and on the job training opportunity, leading to achievement as an apprentice for student participants. TMCC provides additional opportunities for apprenticeship students to enhance their knowledge through certificates and degrees in association with the union training programs. The current Apprenticeship program is managed within TMCC by the Applied Industrial Technology Division. Only indentured apprenticeship students, sponsored by local union apprenticeship programs and approved by the Nevada State Apprenticeship Council are permitted to enroll and participate in the emphasis area course and curriculum. The apprenticeship program courses have been

designed to provide participants with basic technical trade knowledge and manual skills required for their type of employment. Courses include subjects such as trade and industry law, job safety, job skill practices, tool and equipment operation and applied math applications. Participants can typically complete their emphasis area of study and on-the-job training requirements within three to five years, leading to journeyman status.

Most apprenticeship participants complete a minimum thirty six credits of technical courses in their first three years and up to 60 credits in five years time. Participants are only permitted to enroll in twelve credits annually. Once the participants complete twelve credits per year, they meet the annual requirements for 144 or more hours of classroom training.

Participants are required by the indentured apprenticeship programs to complete six core credit hours of on-the-job training and work experience, usually through internship training with employers. In addition, participants are required to complete at least three credit hours of technical core courses related to plan reading and drawing interpretation.

Currently, the completion of an Associate of Applied Science Degree requires completion of 12 credit hours of General Education courses, 42 credit hours of Approved Apprenticeship courses that are combined with the 6 credits of approved Elective Apprenticeship courses for the degree minimum of 60 credits.

The Certificate of Achievement requires completion of 3 credits of General Education courses, 3 credits of elective courses combined with 24 credits of approved Apprenticeship courses for the certificate minimum of 30 credits.

The Skills Certificate Requires completion 12 credits of Approved Apprenticeship courses.

Currently the following Northern Nevada Apprenticeship programs participate with TMCC for the Skills Certificate, Certificate of Achievement and Associate of Applied Science Degree as delineated in the Memorandum of Understanding between TMCC and the individual Apprenticeship Training Programs.

Bricklayers: BRL	
Carpenters: CPT	
Cement Masons: PLCM	
Electricians: ELEC	
Iron Workers: IRW	
Sheet Metal: SMTL	
Operating Engineers: OPE	
Painters and Decorators: PTD	
Plasterers: PLST	
Plumbers and Pipefitters: PPF	
Refrigeration (HVAC): RS	

## 1.B. Program or Unit Mission

### Apprenticeship 2022-23 PUR Self-Study

**State the department's or unit's mission. Describe how it aligns to the College's Mission, and how program learning outcomes (PLOs) for degrees and certificates offered, or for the unit, align to the department/unit mission. If your department or unit does not currently have a mission statement, please discuss among your colleagues and develop one.**

In collaboration with the Northern Nevada Apprenticeship Training Programs, the Nevada State Department of Education, the Nevada State Apprenticeship Council, TMCC provides indentured apprenticeship participants the opportunity to enhance their technical training and skills by earning a Skills Certificate, Certificate of Achievement and/or Associate of Applied Science Degree (AAS).

This directly relates to one of TMCC's mission: to prepare students for jobs in industries in Nevada. The PLOs for the Apprenticeship program all connect to that goal and the program mission statement.

### 1.C. Program Learning Outcomes

**Apprenticeship 2022-23 PUR Self-Study**

Program Learning Outcomes (PSLOs or PLOs)
<b>Apprenticeship</b>
<b>AAS Apprenticeship</b>
PSLO1: Demonstrate the principles, skills, and applications of the associated building or utility trades to work in the industry. (Active from Spring 2022)
PSLO2: Perform tasks in accordance with local and national regulations. (Active from Spring 2022)
PSLO3: Demonstrate the principles, skills, and applications of the specific trade to work safely and efficiently in the industry. (Active from Spring 2022)
<b>Certificate of Achievement Apprenticeship</b>
PSLO1: Demonstrate the principles, skills, and applications of the associated building or utility trades to work in the industry. (Active from Spring 2022)
PSLO2: Perform tasks in accordance with local and national regulations. (Active from Spring 2022)
PSLO3: Demonstrate the principles, skills, and applications of the specific trade to work safely and efficiently in the industry. (Active from Spring 2022)
<b>Skills Certificate Apprenticeship</b>

Program Learning Outcomes (PSLOs or PLOs)
PSLO1: Demonstrate the principles, skills, and applications of the associated building or utility trades to work in the industry. (Active from Spring 2022)
PSLO2: Perform tasks in accordance with local and national regulations. (Active from Spring 2022)
PSLO3: Demonstrate the principles, skills, and applications of the specific trade to work safely and efficiently in the industry. (Active from Spring 2022)

## 2.A. Progress on Previous Findings and Recommendations

### Apprenticeship 2022-23 PUR Self-Study

**Describe your progress on the major findings and recommendations for the program/unit from the last PUR, any annual progress reports (APRs), and if applicable, external reviews, (e.g. advisory boards, articulation committees, and program accreditors).**

- **Which findings and recommendations have the program/unit addressed?**
- **Which have yet to be accomplished? Which are no longer relevant, and why?**
- **Has the program/unit undergone any major changes as a result or that would impact the findings and recommendations since the last PUR?**

Recommendations from last PUR

- Complete CAR schedule established through Spring 2016. Update five-year course assessment cycle for apprenticeship courses through Spring 2020. CAR reports were completed through 2021. With the change of deans and administration some apprenticeship programs were missed on completing CAR reports. The switch over to eLumen has created a lot of missing course objectives that did not allow some apprenticeships to complete CAR reports. The Chair of Technical Sciences has worked with the Unions Apprenticeship programs to realign and submit all degrees and certificates through CRC and NSHE this included submissions and realignment of all courses through CRC and NSHE. All the apprenticeship program lead instructors have been given access to and are being trained to complete CAR reports in eLumen. Working with the Assessment and Planning Office the CAR schedule has been revamped to allow the completion of CAR reports in a timely and efficient manner. Training of lead instructors in all apprenticeship programs will continue once all courses are entered in eLumen with the proper course objectives and outcomes.

- Develop new financial model for apprenticeships to guarantee that TMCC is adequately supporting this important program before the program is lost to WNC which has a more favorable financial model for unions. There have been updates to the MOU to make TMCC more competitive with WNC that has a more favorable financial model that has kept the unions at TMCC.

- Modify union agreements to require compliance with college assessment needs in program. The MOU has been updated to require the unions to complete assessments in their programs.
- Technical Sciences division analyze potential compatible degree pathways to create a seamless transition for students with apprenticeship credits to gain supervisory or management positions.  
The Technical Sciences division has created a seamless transition for students to gain supervisory or management positions by realigning the degree and certificate pathways for stackable credentials that allow students to get to their AAS degrees with possible pathways to entrepreneurship degrees. This should give them the knowledge and skills for supervisory or management positions.
- Continue to support embedding mathematics and human relations in program courses. All apprenticeship program courses have been submitted through CRC and have imbedded Math, Human Relations and Science in their first two years. This enables the apprenticeship programs to get a Certificate of Achievement in the first two years of the apprenticeship program.
- Consider greater outreach to apprenticeship students to tie them to TMCC, even tokens of TMCC membership, like pens or shirts.  
A new Skills Certificate was formed and administration is tracking completers of this certificate. This allows TMCC to give the student his first certificate in his first year of an apprenticeship program. With this recognition of completion students feel they are a part of TMCC. This also leads them to completing their Certificate of Achievement the following year.

## 2.B. Workforce Needs (AAS degrees and certificates; allied health programs only)

### Apprenticeship 2022-23 PUR Self-Study

**Describe how your program(s) is/are meeting workforce needs, especially in the Northern Nevada region, by answering the accompanying questions. The following are potential resources for labor market data, though other sources may be referenced.**

**Nevada Department of Employment Training and Rehabilitation (DETR) (<https://detr.nv.gov/>)**

**Economic Development Authority of Western Nevada (EDAWN) (<http://edawn.org/>)**

**U.S. Bureau of Labor Statistics (<http://www.bls.gov/>)**

- **What is the evidence for the regional need for the program (DETR and EDawn data)?**
- **What is the evidence that program curriculum meets the latest industry trends or workforce needs?**

Note: Please use this link for DETR for labor market projections: <https://www.nevadaworkforce.com/Home/DS-Results-Projections2>

The apprenticeship program consists of 11 different apprenticeships that students can achieve an AAS, Certificates of Achievement, or Skills Certificates for. Each of the apprenticeships is designed with input from local trade unions to ensure that students are receiving the skills needed to be workforce ready in the different areas.

The DETR website was used to determine the regional needs for workers in each of the apprenticeship area and all areas showed projected long term growth for the years 2020-2030.

For the BRL apprenticeship training program: brickmasons and blockmasons are projected to see an 8.46% job growth while helpers - brickmasons and blockmasons have a projected 12.42% growth.

For the CPT apprenticeship training program: carpenter job growth is projected at 17.57%, helper-carpenters at 13.7%, and for cabinet makers and bench carpenters the growth is projected to be 11.31%.

For the PLCM apprenticeship training program: cement masons and concrete finishers have a projected job growth of 17.04%.

For the ELEC apprenticeship training program: electrician job growth is projected to be 29.44%.

For the IRW apprenticeship training program: reinforcing iron and rebar worker projected job growth is 23.82% and for structural iron and steel workers it is projected to be 25.06%

For the SMTL apprenticeship program: sheetmetal worker job growth is projected to be 16.22% (with some areas showing projected growth over 28%).

For the OPE apprenticeship program: there is a projected job growth of 20.6% for operating engineers.

For the PTD apprenticeship program: painters, construction and maintenance are projected to have 18.88% job growth and helpers - painters, paperhangers, and plasterers have a projected job growth of 25.26%.

For the PLST apprenticeship program: plasterers and stucco masons projected overall job growth of 25.38%.

For the PPF apprenticeship program: job growth for plumbers, pipe fitters, and steamfitters is projected to grow by 21.62%.

For the RS apprenticeship program: refrigeration (HVAC) job growth is projected to be 21.15%.

Taken as a whole, this data indicates that regional job demands for all 11 apprenticeship program are expected to increase in Nevada between 2020 - 2030.

In order to meet that demand TMCC has established relationships with the different trade unions to ensure work-force readiness for students in the different apprenticeship programs. This can be seen by a significant increase in total awards granted from 47 in 2017-2018 to 167 in 2021-2022.

## 2.C. Accessibility and Cost of Instructional Materials

### Apprenticeship 2022-23 PUR Self-Study

- **What are faculty in the department/unit currently doing or planning to help ensure that instructional materials are accessible to students with disabilities? Examples include attending Professional Development accessibility sessions, running accessibility checkers on materials, and completing the “Creating Accessible Content” workshop.**

- **What are faculty in the department/unit currently doing or planning to offer affordable instructional materials to students? Examples would include internal development of educational materials or utilization of open educational resources (OER).**

All Apprenticeship Unions have their own library's and instructional materials on site for student usage. All materials needed for students with disabilities are available on site at each facility. The Nevada State Apprenticeship Council accredits these programs and materials. Courses are taught using lectures, labs and on-the-job training. Integration of tools and equipment utilized by a specific program discipline is a core ingredient of all apprenticeship programs.

## 2.D. Catalog Review

### Apprenticeship 2022-23 PUR Self-Study

- **Is the program information in the catalog correct, including descriptions, PLOs, course descriptions, and course offerings, accurate?**

- **Does the program's suggested course sequence in the catalog allow for completion of degrees within 2 years and/or certificates within 2 semesters for full-time students?**

- **Are there any courses that the department has not offered in 4 or more years? Please indicate whether you plan to update and offer, or deactivate the(se) course(s) in the next academic year.**

- The program information has gone through a extensive rebuild. All degrees and certificates have been rewritten and approved through Curriculum Review Committee. This includes course descriptions, Program Learning Outcomes and course offerings. This took place spring 2022.

- The course sequence has been restructured and all approved apprenticeship participants can complete a Skills Certificate in the first two semesters. The Certificate of Achievement is completed in the first two years. All approved Apprenticeship areas have a opportunity to complete an AAS Degree with completion of their Journeyman level status and general education

requirements.

- All courses that were not offered or had no enrollment have been deactivated or updated to new descriptions and outcomes to better align with PLOs. Forty six courses were updated and approved through CRC, Faculty Senate and NSHE Common Course Numbering.

### 3.B. Evidence of Program Learning Outcomes Assessment

#### Apprenticeship 2022-23 PUR Self-Study

**Summarize the most significant program assessment results since your last PUR. These will come from past CARS, APRs, and Action Plans and assessment data within eLumen. Please discuss course assessment findings as they apply to the program and program learning outcomes.**

Assessment of the Apprenticeship program has proven to be extremely difficult. The instructors are volunteers in the eLumen program for assessment. This has created a huge problem with getting assessments completed. Administration is working on a resolution to the problem and a guide to getting instructors and administrators in the apprenticeship programs in the system so they can do assessment. Some assessment has been completed due to constant trying by the chair of technical sciences. The problems have led to rewriting the AAS, COA and the skills certificates. All course learning outcomes and measures have been redone to align with new program learning outcomes and measures. (Opening the blue file at the top will show some assessments that were done since last PUR)

**Describe how department faculty implemented plans to improve students' achievement of program learning outcomes. What changes did you make to the program based on assessment results and improvement plans?**

Changes made to the program include rewriting the AAS, COA and the skills certificates. All course learning outcomes and measures have been redone to align with new program learning outcomes and measures. This has helped the students with achieving program learning outcomes that align with industry standards.

### 3.C. General Education Outcomes Assessment (if applicable)

#### Apprenticeship 2022-23 PUR Self-Study

- **Describe which general education learning outcomes (GELOs) you assessed in your department/unit and summarize the most significant assessment results.**
- **Describe how department faculty implemented plans to improve students' achievement of GE learning outcomes. What changes did you make to general education based on assessment results and improvement plans? Do any CLOs need to be changed to align with GELOs?**

N/A



### 3A. Curriculum Mapping

#### Apprenticeship 2022-23 PUR Self-Study

Curriculum Mapping was completed a year ago then all AAS, Certification of Achievement and skills certificates were redone and submitted through CRC. All courses were put through CRC and changed to make all outcomes and measures align with new AAS, COA and Skills Certificate outcomes and measures. All mapping of new outcome and measures will be completed by Fall 2023. This is due to the elimination of the old degrees and certificates. All courses were modified to produce a scaffold effect in the programs. All changes will create a well balanced curriculum map.

**Please analyze the following. Remember to paste a copy of your curriculum map.**

- **PLOs: Do all PLOs reflect what you want students to demonstrate once they complete the program? Are there any PLOs that need to be updated?**
- **Potential gaps and redundancies: Are there any PLOs that are not addressed in the curriculum? Are there any unwanted redundancies of PLOs in the curriculum?**
- **CLO alignment: Is there a need to modify any course learning outcomes so that courses better support PLOs?**
- **Course sequencing: Is there a need to modify the course sequencing so that learning is scaffolded throughout the program? In other words, courses taken earlier in the program sequence should introduce PLOs, and courses taken later in the sequence should reinforce PLOs by offering students additional opportunities to practice.**
- **Curriculum and learning opportunities: Is it necessary to introduce new learning opportunities to reinforce learning in specific courses? These could be modules or assignments in courses, additional courses, and/or co-curricular opportunities that would be required of all students in the program.**
- **Do you need to make any changes to the curriculum map after this analysis?**
- **Other?**

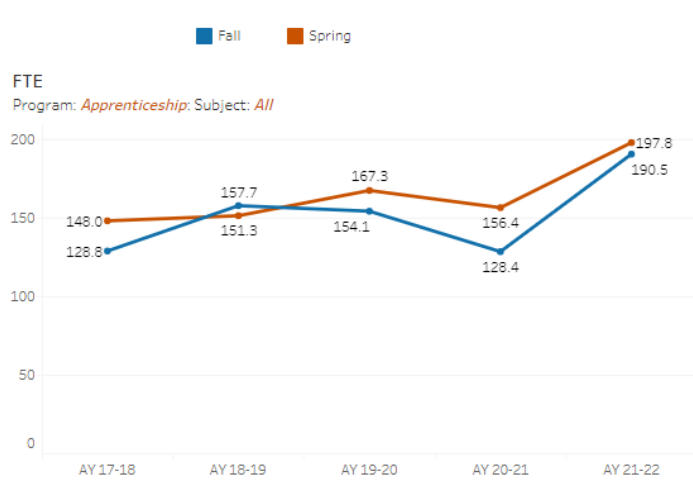
Answered above.

### 4.A. FTE and Section Count

#### Apprenticeship 2022-23 PUR Self-Study

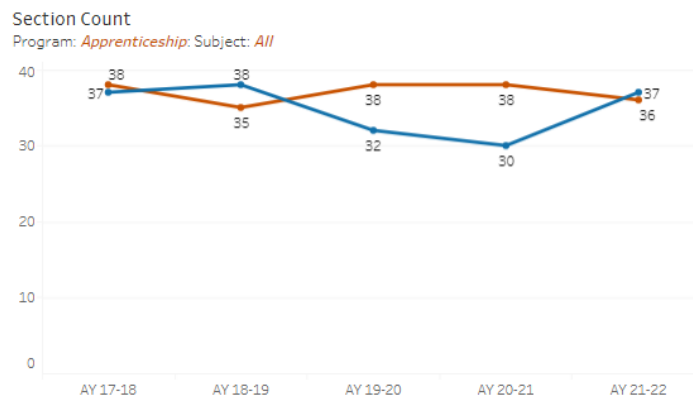
**FTE and Section Count**

Program:  Subject:  Level:  Term:



**5 Year Change in FTE**

	Fall	Spring
CPT	65%	108%
ELEC	41%	38%
IRW	182%	0%
OPE	41%	58%
PLCM	127%	145%
PLST	60%	300%
PPF	23%	-30%
PTD	-43%	-50%
RS	46%	100%
SMTL	82%	57%
Division		
Business and Social Sciences	-3%	-9%
Liberal Arts	-18%	-23%
Life Sciences, Allied Health & Public Safety	-7%	-6%
Math & Physical Sciences	-13%	-16%
Technical Sciences	7%	7%
TMCC	-8%	-12%



**5 Year Change in Section Count**

	Fall	Spring
CPT	-25%	-25%
ELEC	0%	0%
IRW	33%	0%
OPE	0%	0%
PLCM	0%	0%
PLST	50%	200%
PPF	0%	-20%
PTD	0%	-33%
RS	-25%	-25%
SMTL	0%	0%
Division		
Business and Social Sciences	-5%	-7%
Liberal Arts	-23%	-26%
Life Sciences, Allied Health & Public Safety	0%	3%
Math & Physical Sciences	14%	-23%
Technical Sciences	0%	-12%
TMCC	-5%	-14%

**Please analyze the trends in FTE and course section counts. Discuss what these trends suggest about the viability of program enrollment.**

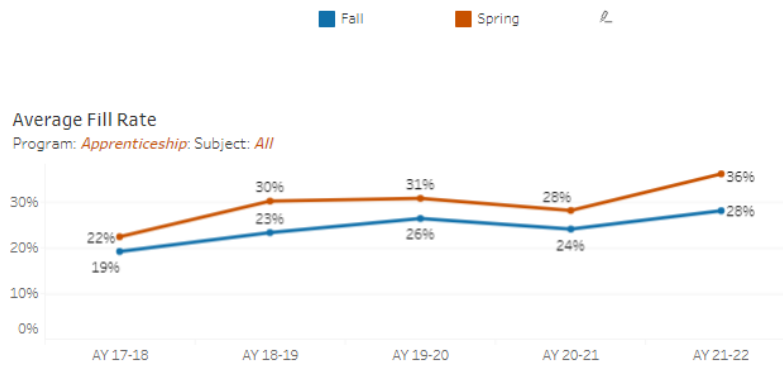
Section counts have stayed steady in the apprenticeship courses. FTE has continued to climb with the new Skills Certificates, Certificate of Achievement and AAS that align with the industry the Union Apprenticeship areas give instruction in. Continued guidance from administration will be the key to keeping the apprenticeships involved with the college. The five year change data shows a steady increase in most areas in FTE with a steady section count. Two areas show a decline in FTE this may be due to a change in the administration in those areas. The technical sciences division has been working with these groups to train the new admins in the apprenticeship programs at TMCC.

## 4.B. Course Fill Rates and Unsuccessful Enrollment Attempts

### Apprenticeship 2022-23 PUR Self-Study

#### Fill Rate

Program: 
 Subject: 
 Level:



5 Yr Avg Course Level Fill Rate  
 Program: *Apprenticeship*; Subject: *All*

	Fall	Spring
CPT 251	14%	22%
ELEC 101	73%	50%
ELEC 151	45%	37%
ELEC 201	64%	42%
ELEC 251	50%	31%
ELEC 291	49%	37%
IRW 101	16%	27%
IRW 151	10%	30%
IRW 201	13%	19%
IRW 251	10%	6%
OPE 100	54%	51%
OPE 150	25%	42%
OPE 200	30%	23%
OPE 250	15%	15%
PLCM 100	10%	9%
PLCM 150	13%	9%
PLCM 200	14%	16%
PLCM 250	18%	9%
PLST 101	7%	3%
PLST 151	4%	5%
PLST 201	7%	5%
PPF 100	26%	51%
PPF 150	34%	64%
PPF 200	52%	62%
PPF 250	41%	63%
PPF 290	23%	49%
PTD 101	10%	9%
PTD 151	8%	7%
PTD 201	5%	5%
PTD 251	11%	5%
RS 101	5%	11%
RS 151	9%	19%
RS 201	8%	13%
RS 251	7%	14%
SMTL 101	27%	67%
SMTL 151	27%	50%
SMTL 201	24%	44%
SMTL 251	19%	27%

	Fall	Spring
CPT	19%	27%
ELEC	55%	39%
IRW	13%	20%
OPE	31%	33%
PLCM	14%	11%
PLST	6%	4%
PPF	35%	58%
PTD	8%	6%
RS	8%	15%
SMTL	25%	48%
Division	Fall	Spring
Business and Social Sciences	69%	63%
Liberal Arts	82%	75%
Life Sciences, Allied Health & Public Safety	80%	78%
Math & Physical Sciences	87%	78%
Technical Sciences	49%	46%
TMCC	73%	67%

**Please analyze the trends in course fill rates and unsuccessful enrollment attempts. Discuss what these trends suggest about meeting student demand.**

The Apprenticeship courses are built with large capacity classes to allow multiple enrollments from semester to semester. Course fill rates are artificially low. Most of the programs are 4-5 year programs that lead to Journeyman level status. The job market has an effect on how many positions there is to fill from year to year. Some programs see a large enrollment change between spring and fall semesters while others will see little to no change in enrollment. There is no unsuccessful enrollment attempts due to admins enroll only students Indentured into the union apprenticeship programs.

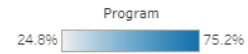
### 4.C. Student Demographics: Ethnicity, Gender, Credit Load, Student Status, and Age Range

#### Apprenticeship 2022-23 PUR Self-Study

Term:  Demographics:

**Subject Takers by First Generation**

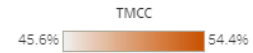
Term: *Fall* Program: *Apprenticeship* Subject: *All*



Selected Granularity	Fall 17	Fall 18	Fall 19	Fall 20	Fall 21
First Generation	75.2%	69.6%	70.1%	69.9%	69.2%
not First Generation	24.8%	30.4%	29.9%	30.1%	30.8%

**TMCC by First Generation**

Term: *Fall*



	Fall 17	Fall 18	Fall 19	Fall 20	Fall 21
First Generation	49.8%	48.2%	48.3%	45.6%	46.5%
not First Generation	50.2%	51.8%	51.7%	54.4%	53.5%

**Demographics: Program Majors**

Program ▼  
 Apprenticeship ▼

This section shows the demographics of the students who are declared majors in your program.

**Headcount of Program Majors**

Program: *Apprenticeship*

Major	Fall 17	Fall 21	5 Yr Change
APPR-AAS	3	100	3233%
APPR-CT			
IRNWRK-AAS	1		
OPENGR-CT	1		
PIPEFT-CT		1	
SHTMTL-AAS	1		

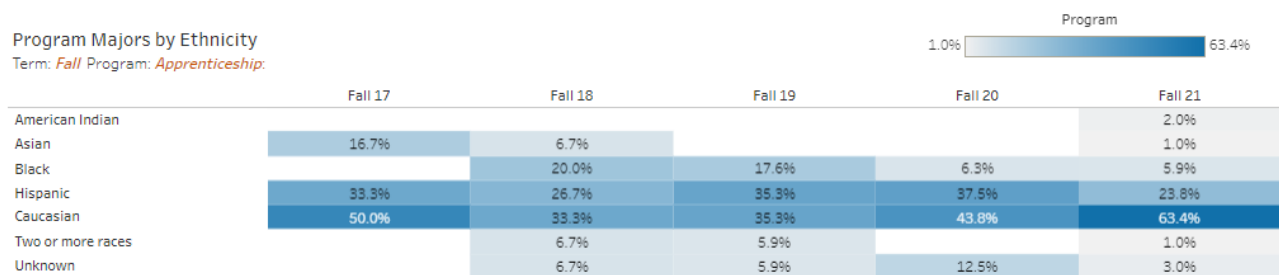
**TMCC Headcount**

Institution	Fall 17	Fall 21	5 Yr Change
TMCC	11110	9923	-11%

Term ▼ Demographics ▼  
 Fall ▼ by Ethnicity ▼

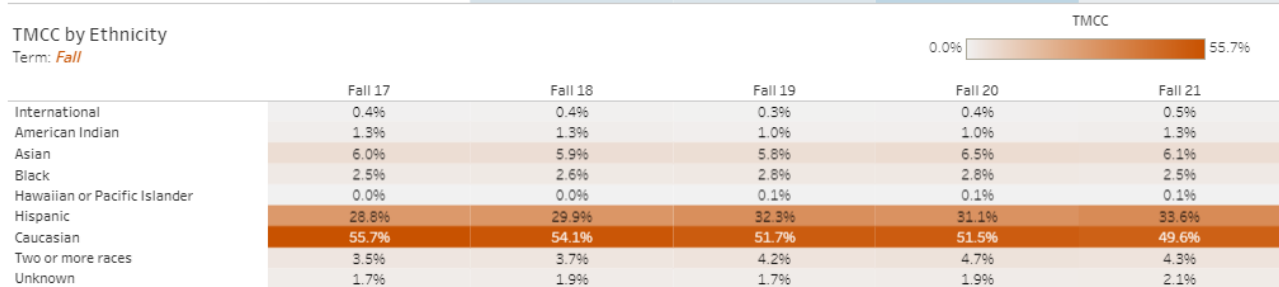
**Program Majors by Ethnicity**

Term: *Fall* Program: *Apprenticeship*



**TMCC by Ethnicity**

Term: *Fall*



**Briefly describe the typical student profile in terms of ethnicity, gender, credit load, student status, and age range in your program/unit, including how they compare to demographics of the college. Please note any potentially underserved student populations and discuss ideas for closing potential equity gaps. An equity gap is where there is a significant and persistent disparity in access or achievement between different groups of students.**

**Does the program’s teaching staff look like its student population? If not, discuss ideas for how faculty can use more inclusive teaching methods.**

While researching the data for the apprenticeship courses there was a big demographic data noticed. The first generation subject takers had a 20-25 percent higher enrollments than TMCC as a whole.

The data for Headcount in Program Majors is not showing the changes in AAS and COA changes to one-degree path instead of eleven paths for the Apprenticeship courses in 2021 that has skewed the data for this area. The data shows a 3233% change in the five-year period. Most of this was due to administration not tracking completers of the previous Degree pathways. A search was completed and there was a lot of completers of the skills certificates and certificate of achievements awarded. Research of the data shows that the apprenticeship courses closely align with the college in ethnicity. Gender is higher than the college most likely due to the nature of the apprenticeship programs. The apprenticeship programs have done extensive out reach to entice other ethnicities and genders to join the apprenticeship programs. Some examples are Building Trade Open Houses, LaborFest 2022 and other events in the Northern parts of the state. The apprenticeships have monthly meetings to cover business and recruitment opportunities.

## 5.A. Course Completion Rates

### Apprenticeship 2022-23 PUR Self-Study

**Please describe any substantial trends or shifts that you see in the overall course completion rate and successful completion (C or better). What might these trends or shifts mean? Next, disaggregate the data by student demographics. Discuss any potential equity gaps and ideas for closing these gaps. An educational equity gap is where there is a significant and persistent disparity in educational attainment between different groups of students.**

### Outcomes: Course Completion Rates

Program: 
 Subject: 
 Level:

The tables below show the percent of students completing your courses. These numbers are compared to all divisions and to TMCC as a whole. The metrics can be disaggregated by the demographics below.

**Completion Rate:** The number of students who remain in a class until the end of the semester and receive A, B, C, D, Pass (P), Satisfactory (S), In Progress (X), Incomplete (I) or Audit (AD) grade notations.

**Successful Completion:** The number of students who completed a course with a C or better (A, B, C).

Gender: 
 Ethnicity: 
 Credit Load: 
 Age Range: 
 Student Status: 
 First Generation: 
 Pell Eligible:

#### Avg Completion & Successful Completion Rates by Subject

Program: *Apprenticeship* Subject: *All*



Subject		AY 17-18 AY	AY 18-19 AY	AY 19-20 AY	AY 20-21 AY	AY 21-22 AY	5 yr Avg
CPT	Completion Rate	100%	100%	100%	100%	100%	100%
	Successful Completion	100%	52%	100%	100%	100%	90%
ELEC	Completion Rate	98%	97%	94%	92%	99%	96%
	Successful Completion	96%	93%	92%	86%	93%	92%
IRW	Completion Rate	89%	79%	94%	83%	91%	89%
	Successful Completion	89%	79%	94%	83%	91%	89%
OPE	Completion Rate	100%	100%	100%	93%	98%	98%
	Successful Completion	90%	100%	100%	93%	97%	96%
PLCM	Completion Rate	95%	79%	96%	89%	63%	83%
	Successful Completion	68%	50%	87%	80%	56%	70%
PLST	Completion Rate	71%	44%	67%	44%	63%	57%
	Successful Completion	0%	44%	67%	44%	25%	32%
PPF	Completion Rate	99%	100%	100%	100%	99%	100%
	Successful Completion	97%	98%	96%	97%	98%	97%
PTD	Completion Rate	82%	91%	82%	75%	89%	84%
	Successful Completion	82%	87%	76%	75%	78%	80%
RS	Completion Rate	100%	100%	100%	96%	100%	99%
	Successful Completion	77%	100%	100%	91%	95%	93%
SMTL	Completion Rate	87%	95%	97%	98%	96%	95%
	Successful Completion	0%	92%	42%	10%	96%	55%

A certificate or degree by participants in the Apprenticeship Program is not a primary goal. Completion of the Apprenticeship program remains the primary focus which provides the participant with the necessary certifications and required licenses to be classified as a "Journeyman" within a particular trade union or industry. Some program participants continue to pursue a certificate or degree in order to advance professionally within their respective industry niche. There are no noted educational equity gaps. Students are indentured into the program with very little attrition.

## 5.B. Graduation and Transfer

### Apprenticeship 2022-23 PUR Self-Study

## Outcomes: Awards & Transfer

Program ▼  
 ▼

This section shows the number of degrees your program has awarded over the past 5 years. A second bar chart shows the rate at which st institutions.

Gender  ▼   
 Ethnicity  ▼   
 Credit Load  ▼   
 Age Range  ▼

**Awards**

Program: *Apprenticeship*



		AY 17-18	AY 18-19	AY 19-20	AY 20-21	AY 21-22	Total Awards
Degrees	APPR-AAS		2		9	16	27
	APPR-CT	1					1
	CRPNTR-CT					2	2
	ELCTRN-CT					50	50
	OPENGR-CT					4	4
	PIPEFT-CT					5	5
	RS-CT					1	1
	SHTMTL-CT					13	13
Skills	CMTMA	1	2		6	5	14
Certificates	COMRFG	4	14	12	9	11	50
	CPTRY	6				1	7
	ELEC	18	9	36	20	34	117
	IRWK	1		1		1	3
	OPENG	2	8	7	4	4	25
	PLPF	7	10	16	9		42
	PNTR		3		1		4
	RFRG			4	3	5	12
	SHMTL	7	6	13		15	41
	<b>Total Awards</b>	<b>47</b>	<b>54</b>	<b>89</b>	<b>61</b>	<b>167</b>	<b>418</b>

Job placement and employment upon completion of a program is the primary objective of each program. Employment is heavily dependent on many factors within the economy in general and specifically the construction industry. With the new Skills Certificates and Certificate of Achievement and new administration the award rates have increased with a search for completions being done at the end of each semester. Skills Certificates are now tracked for completion and then awarded.

**Please discuss any trends or shifts that you see in the number of graduates and graduates who have transferred in the past 5 years.**

**Next, disaggregate the data by student demographics, and discuss any potential equity gaps: Which student populations are earning degrees or certificates compared to the demographic makeup of**



**the program? Do graduates resemble the student demographics of the program? If not, discuss ideas to mitigate potential equity gaps.**

Job placement and employment upon completion of a program is the primary objective of each program. Transfers usually do not happen with this type of program. There are no potential equity gaps to discuss.

## **6.A. Faculty Achievement**

### **Apprenticeship 2022-23 PUR Self-Study**

**Describe the program/unit's full-time (FT) faculty credentials, experience, and highlights of significant activities and/or contributions to TMCC. Please use the format below for each FT faculty member.**

- **Faculty Name, FTE**
- **Degree(s) or professional certification(s) awarded, discipline, awarding institution**
- **Substantial accomplishments or contributions to the community, especially those related to education or your discipline (e.g. mentoring, community service) (Please limit to 3)**
- **Number of years teaching at TMCC**
- **Total number of years in academia**
- **Primary courses taught**
- **Significant activities or contributions made to TMCC (Please limit to 3)**

Each Apprenticeship program hires their instructors directly. Several programs have dedicated full time instructors, while most programs hire part time instructors from their own resource pool of well qualified and Journeyman level workers. The available list of qualified instructors within the active membership of the respective unions varies from semester to semester.

## **6.B. FT/PT Faculty and Student Credit Hours Taught**

### **Apprenticeship 2022-23 PUR Self-Study**

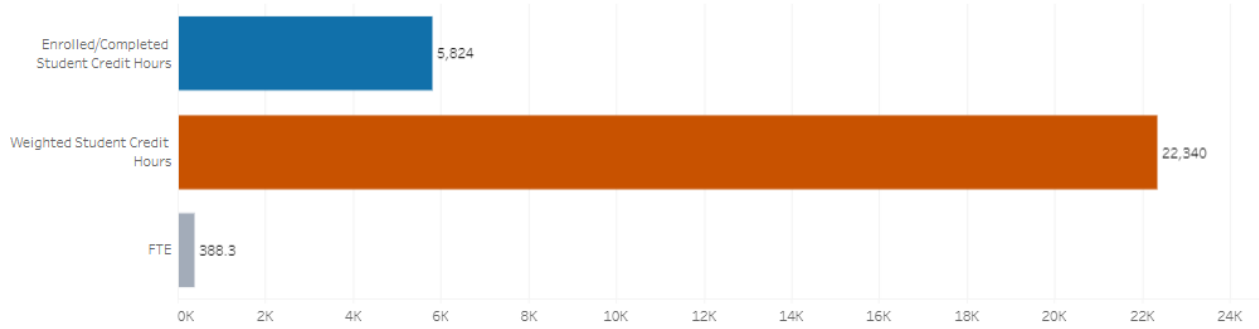
**Weighted Student Credit Hours**

Academic Year: 21-22 | Division: Technical Sciences Division | Discipline Cluster: Trades/Tech

Semester: (All) | Department: Apprenticeship | Instructional Level: (All)

**Student Credit Hours, Weighted Student Credit Hours and FTE**

Academic Year: 21-22 Semester: All



**Summary**

Academic Year: 21-22 Semester: All

Support Level	Lower Division ..	Upper Divisio..	Enrolled Student Credit Hours	Completed Student Credit Hours	Weighted Student Credit Hours	FTE
Trades/Tech	4		5,824	5,585	22,340	372.3
W				44		2.9
F for Non-Attendance				175		11.7
Non-Residents				20		1.3
<b>Total</b>			<b>5,824</b>	<b>5,824</b>	<b>22,340</b>	<b>388.3</b>

**Describe the trends or shifts in the number of full-time (FT) and part-time (PT) faculty, and the number of student credit hours (SCH) taught by FT and PT faculty since the last program/unit review. What Impact, if any, have these trends or shifts had on the program/unit?**

Each Apprenticeship program hires their instructors directly. Their instructors are not hired by TMCC.

**6.C. Support Staff**

**Apprenticeship 2022-23 PUR Self-Study**

**Describe the program/unit's support staff, including their FTE, major duties, and any specialized credentials necessary to carry out their duties. Is the number of staff adequate to support the program/unit? Explain.**

TMCC established a formal partnership with apprenticeship programs more than two decades ago. It is similar to relationships established across the country and recognizes that apprenticeship programs provide quality, post-secondary training with multiple layers of oversight that is driven directly by workforce demands. Each apprenticeship program and their curriculum must be approved by the U.S. Department of Labor's Bureau of Apprenticeship Training, the Nevada Labor Commission's State Apprenticeship Council, and Joint Apprenticeship Training Councils required by statute for every individual program. The courses are also approved through TMCC's curriculum process and are required to comply with all policies governing regular TMCC courses including assessment, student evaluations, instructor observations, etc. Unlike traditional courses, however, delivery of the training is managed exclusively by the partnering apprenticeship program. TMCC reviews instructor qualifications, but does not directly employ the instructors or apprenticeship coordinators.

## 6.D. Facilities and Technology

### Apprenticeship 2022-23 PUR Self-Study

**Describe the facilities and technology used by the program/unit, and discuss any unique requirements. These may include labs, studios, off-campus sites, computer classrooms, specialized equipment, etc. Are program/unit facilities and technology adequate to support the program? Explain.**

Northern Nevada Bricklayers and Tilesetters, JATC

Northern Nevada Carpenters, JATC

The Carpenters presently use a 30,000 square foot training facility equipped with classroom and floor space to conduct in both hands-on and classroom training located at 1350 Financial Blvd. in Reno. Classrooms are equipped with projectors and audio visual aids, while a maintain a fully equipped welding lab. Equipment includes a forklift, aerial lift, rough, all-terrain forklift and a scissor lift.

Northern Nevada Plasterers and Cement Masons, JATC

Classes are held at the Job Corps Training Center. Both trades have a working area and classroom.

Northern Nevada Electrical, JATC

The Electricians facility has a multi-purpose room, and classrooms dedicated to green energy, Low

voltage/telecommunications, safety and fall protection. A computer lab is used for online courses and there is a hands-on mock-up wiring display for wiring exercises.

Painters and Allied Trades, JATC

The Painters and Allied Trades have a 2200 square foot facility that includes open areas and a dedicated classroom.

Field Ironworkers, JATC

The Ironworker facility has dedicated classrooms with PowerPoint, 3d aids, mock ups and a welding shop with 20 booths. The yard area includes steel structures, a metal building and rebar racks.

Northern Nevada Plumbers and Pipefitters, JATC

The Plumbers and Pipefitters facility has multiple classrooms, computer lab, multi-purpose room, solder/braze ab, fixtures/equipment lab, weld facility, rigging structure and HVAC/Service labs.

Northern Nevada Sheet Metal Apprenticeship, JATC

The Sheet Metal facility includes dedicated classroom, welding lab and a sheet metal lab, which includes welding machines, shear machines, metal breaks, roll formers, plasma machine and other associated machinery to the trade.

Northern Nevada Operating Engineers, JATC

Nevada Energy Gas Apprenticeship

Classes and training facilities are located primarily at the Ohm Place complex. The complex houses a dedicated computer room area, small reference library, lab with specialized equipment, along with a multi-purpose training room.

## 7.A. Five-Year Plan

### Apprenticeship 2022-23 PUR Self-Study

**Using your analyses from previous sections, develop a 5-year plan for the program(s). Include an estimated timeline of goal completion. Please address the following questions:**

- **Using the most significant curriculum and assessment-driven findings, describe strategies to sustain or improve student learning. This may include deactivating existing courses or introducing new courses or programs to meet current trends in the discipline or industry.**
- **After considering the most significant enrollment findings, discuss strategies, if needed, to improve enrollment and address these factors. These may include more efficient scheduling, streamlining pathways to completion, outreach to underserved students, internal or external factors anticipated to impact future enrollment, etc.**
- **With respect to course completion rate, graduation, and transfer, discuss strategies to enhance student success and close equity gaps. These may include curriculum changes, pedagogical changes, streamlining pathways to completion, improving advising, mentoring, retention efforts, etc.**

**Considering the above strategies, what are the major goals that the department/unit hopes to accomplish in the next 5 years? Include an estimated timeline of goal completion. How does the department or unit plan align with the Academic Affairs Strategic Plan or the College's Strategic Master Plan?**

Continue to train part-time instructors on how to conduct assessment (AY 23-24 and on-going).

Develop an assessment schedule for the different apprenticeships so that each is assessed on a five-year schedule (AY 23-24).

Work with the different trade unions for outreach to mitigate equity gaps (e.g., male:female enrollment gap) (AY 22-23 and ongoing).

Hire an apprenticeship coordinator to maintain union relationships and assessment practices. (AY 23-24)

Due to the ever-changing nature of the job requirements and the balance of 11 different trade unions, a comprehensive five-year plan that covers everything is not feasible.

## 8.A. Resource Requests

### Apprenticeship 2022-23 PUR Self-Study

**Identify any resource requests. For each request, please indicate whether the request is for an additional faculty and/or staff position, capital improvements (facilities), technology or specialized instructional resources, or professional development. Address the following items:**

- **Request (Additional faculty/staff, capital improvements, technology or other specialized instructional resources, or professional development)**
  - **Estimated time to hire or time the request will be made.**
  - **Projected measurable outcomes. Which PLOs and/or student success metrics does the department hope to improve as a result of the request?**
  - **Alignment to the Academic Affairs or College's Strategic Plan**

The Apprenticeship unions has their own facilities. Improvements and technology in the specific areas is done continually to provide industry related training for employment in a very diverse field of study. The continuous hiring of staff and improvements in training from semester to semester keeps the unions in line with the colleges strategic plan.

Request: Apprenticeship Coordinator

Estimated time to hire: SY 23-24

Measurable Outcomes: Having a position dedicated to maintaining relationships with the different trade unions and being able to train the union members who will be teaching the classes about

assessment and learning outcomes will improve assessment quality, and with that, data will be present for any needs that need to be made to PLOs to ensure student success.  
TMCC Strategic Plan Alignment: This position would directly align with the values of: evidence of student progress through assessment of student outcomes and community development through partnerships and services.

## Academic Standards and Assessment Committee Findings and Recommendations

### Apprenticeship 2022-23 PUR Self-Study

Date of Review: 4/28

Date of Meeting Review: 7/6

Date entered into eLumen: 7/6

### Academic Standards and Assessment Committee's Findings:

The Academic Standards and Assessment Committee finds that the Apprenticeship Program is an important program for meeting the TMCC goal of workforce readiness. The Department Chair has done laudable work to make the program current and establish working relationships with the 11 different Trade Unions represented. The committee is concerned about the lack of in-house assessment, though there is a self-identified plan to increase this. The committee supports the resource request for an Apprenticeship Coordinator position to maintain program viability, for program growth, and to maintain working relationships with the different Trade Unions.

### Program Strengths:

- The new assessment plan, curriculum revisions (completed in Spring of 2022), and MOU are laudable; these have updated the program and simplified the credit structure to be able to more easily track and award skills certificates in the different trade areas .
- DETR data supports strong short and long-term growth projections in all 11 apprenticeship programs in Northern Nevada.
- The various Apprenticeship programs bring a sizable 4.0 value for weighted student credit hours (WSCH).
- All instructional resources are available to students on-site and provided by the different Trade Unions.
- FTE, student success rates, and awards support program viability.
- There are concrete, actionable plans to mitigate gender and ethnicity equity gaps in enrollment.
- There do not appear to be any equity gaps in completion and successful completion rates.
- Goals are concrete, actionable, feasible, and cover a relevant time frame.

### Areas of Concern or Improvement:

- It is unclear if the instructional materials are accessible.
- There is a self-identified lack of direct assessment; indirect assessment is being done.
- There are noted gender and ethnicity equity gaps in enrollment.

**Recommendations:**

- Work with the Trade Unions and DRC to ensure accessibility of materials, as possible.
- Implement the self-identified plan to increase direct assessment of PLOs.
- Continue working with the Trade Unions to mitigate the noted enrollment equity gaps.
- While not specifically asked for in the PUR, additional discussion of WSCH would help emphasize how valuable the program is for TMCC.
- ASA supports the resource request for an Apprenticeship Coordinator position.

**Other comments:**

Are support services at TMCC adequate for program oversight, success and growth?

**Dean's Findings and Recommendations****Apprenticeship 2022-23 PUR Self-Study**

This section has no content

**Vice President of Academic Affairs' Findings and Recommendations****Apprenticeship 2022-23 PUR Self-Study**

This section has no content