# ACADEMIC PROGRAM PROPOSAL FORM
*(Revised: January 2021)*

**DIRECTIONS**: *Use this form when proposing a new major or primary field of study, new emphasis (BAS only), or new degree or certificate (30+credits) program. **For more detail on the NSHE program approval process, see the last page of this form.***

**DATE SUBMITTED:** 10.17.2021

**INSTITUTION:** Truckee Meadows Community College (TMCC)

**REQUEST TYPE:**
☒ New Degree
☐ New Major or Primary Field of Study
☐ New Emphasis (BAS only)

| | |
|---|---|
| *Date of AAC Approval:* **12-01-21** | *Date of Board Approval:* |

**DEGREE: Check applicable box**

☐ Certificate: 30+ Credits
☐ Associate of Science (AS)
☐ Associate of Applied Science (AAS)
☐ Bachelor of Arts (BA)
☐ Master of Science (MS)
☐ Doctor of Philosophy (Ph.D.)

☐ Associate of Arts (AA)
☐ AA/AS
☐ Bachelor of Applied Science (BAS)
☐ Bachelor of Science (BS)
☐ Master of Arts (MA)
☒ Other or Named Degree: Bachelor of Architecture

**MAJOR OR PRIMARY FIELD OF STUDY** (i.e. Animal Science): Architecture

**INCLUDED IN THE NSHE PLANNING REPORT:** ☒ Yes ☐ No
**(Website for NSHE Planning Reports: https://nshe.nevada.edu/administration/academic-student-affairs/reporting/planning/**

**TOTAL NUMBER OF CREDITS TO PROGRAM COMPLETION:** 150

**PROPOSED SEMESTER/TERM OF IMPLEMENTATION:** Fall 2022

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**Action requested (specify full program title):**
Approval of Bachelor of Architecture at TMCC. Pursuant to Title 4, Chapter 14, Section 10, that the proposal was reviewed by Council of Presidents on 10/20/21 and they support it moving forward.

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**A. Brief description and purpose of proposed program. For proposed certificates (30+ credits), provide any existing degree or program under which the certificate falls.**

**The B.Arch. combines the knowledge and depth of both STEM and CTE fields of study.** July 31st, 2018, President Trump signed into law HR 2353 officially recognizing architecture as a STEM

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subject. The act was cited as the "Strengthening Career and Technical Education for the 21st Century Act".

**CTE.** Architecture is listed under the "Skilled and Technical Sciences" National Career Cluster as represented by the Nevada Department of Education.

**STEM**. TMCC embraces our role of furthering the "Next Generation Science Standards" initiative. TMCC's architecture program has been integrating the following disciplinary core ideas:
- ESS 1: Earth's place in the universe, ESS 2: Earth's systems, ESS3: Earth and human activity, ETS 2: Links among engineering, technology, science, and society, LS 2: Ecosystems, PS 2: Motion and stability and PS 3: Energy.

**Endurance & Resiliency.** TMCC associates of architecture degree pathway was established 1989. The B.Arch. will build upon thirty-two years of experience.

**Description.** The proposed five (5) year B.Arch. degree builds upon an existing Associate of Applied Science in Architecture (60 credits), a stackable Architectural Drafting Skills Certificate (31 credits) and two (2) skills certificates totaling twenty-one credits. The proposed B.Arch. will build upon the existing frame work by adding 90 additional credits for a total of 150 credits. The proposed five-year degree path and 150 credits to completion align with the accreditation requirements for the Bachelor of Architecture professional degree defined by the NAAB and meets the minimum NRS licensure requirements.

**Purpose.** The purpose is to: 1) Increase student access via TMCC's Jump Start dual enrollment programs that are affordable. 2) Close the achievement gap among underserved populations. 3) Align the curriculum to meet Nevada's rapidly growing workforce needs. 4) Increase student access with multiple learning modalities, wide-ranging class scheduling, and partner with local industry on curriculum development and internship opportunities. 5) Create the fastest and most affordable route towards licensure without compromising quality. 6) Develop and shape a program that is informed by industry and leverages Nevada's research institutions to address issues such as energy (infrastructure, demand, and utilization), climate change, wildfire safety, drought cycles, water quality, and creates housing/community opportunities that will provide equal access to opportunities and resources for people who might otherwise be excluded or marginalized such as those who have physical or mental disabilities and members of minority groups.

**Background – Licensure.** Improperly designed buildings can pose a threat to occupants and the public. The essential purpose of licensing architects is to protect the health, safety and welfare of the public and shield consumers from unqualified practitioners. Nevada is both a practice and title act state. Title acts refer to those licensure laws that restrict the use of a specific title to only those individuals meeting education, training, and examination standards. Practice acts refer to those licensure laws that prohibit the practice of professional counseling without obtaining licensure.

**Background – NV State Licensing Board.** The Nevada State Board of Architecture, Interior Design, and Residential Design (NSBAIDRD) is established under the provisions of NRS Chapter 623. State licensing boards regulate the profession and ensure Architects have the skills and knowledge necessary to protect the public. Boards accomplish this by setting state-specific requirements for architectural education, experience and examination. It is in the public interest to maintain strong and independent state licensing boards. State of NV educational requirements are as follows:

**Background - Education.** As outlined in the Nevada Revised Statutes (NRS 623.190), students must satisfactorily complete 5 years of study, satisfactorily completed, in an architectural program

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accredited by the National Architectural Accrediting Board (NAAB). Therefore, students who want to receive an architecture degree have two options: either a five-year undergraduate degree in architecture known as a Bachelor of Architecture (BArch) or a post-college master's program known as a Master of Architecture (M. Arch.), which typically takes two to three years to complete beyond a four-year bachelor degree in a related field. In general, Master's programs are useful for those wanting do to research and/or teach, not necessary to qualify for licensure.

**Background – Experience.** In addition to meeting educational requirements, architects must complete an extensive professional experience program that documents thousands of hours of practical experience under the supervision of a licensed architect in all aspects of professional practice. TMCC will continue to facilitate opportunities for internships.

**Background Summary** – Though there are four-year Bachelor of Science, Bachelor of Arts and Bachelor of Fine Arts programs in architecture, they are not nationally accredited by NAAB. Students who choose to pursuit a career in architecture as a licensed professional Architect should know that options are available, and that a five-year BArch program is the fastest and least expensive path into the architecture profession.

B. **Provide a list and description of institutionally approved expected student learning outcomes Program**

**Outcome #1:** Recognize the ability to describe and develop design solutions as it pertains to environmental, social equity and cultural topics.
**Program Outcome #2:** Develop, Recognize and apply technical skills as it pertains to building practices.
**Program Outcome #3:** Recognize the ability to describe and develop integrative architectural design solutions
**Program Outcome #4:** Discuss, differentiate and evaluate the professional practice of architecture.

C. **Provide an institutionally approved plan for assessing student learning outcomes**.

With the proposed path of an accredited degree and in conformance with state licensure criteria, TMCC's BArch will adhere to both formative and summative assessments.

**Formative Assessment.** Formative assessment is ongoing, flexible, and more informal analysis tool. Formative fits into the lesson planning. It is focused on the individual students, their needs, and strengthening their learning process.

**TMCC Advisory Boards**. Career programs, employers and students exist in a rapidly changing environment. The pace of change requires that we review our curriculum and practices often to make sure they are relevant and meet employers' expectations.

**TMCC Program Unit Reviews.** Truckee Meadow Community College's Program/unit Review (PUR) is one measure of its commitment to excellence. The PUR is a cyclical opportunity (every five years) for program units to reflect on their contributions to the College and to strategize about future improvement, sustainability, and growth. The goals of the PUR are to: 1). Improve teaching, student learning, and program completion. 2). Assess program or unit viability, quality, curriculum currency. 3). Develop program or unit strategic plans that align with the overall mission and strategic direction of the college. 4). Provide data and evidence to support resource allocation and decision-making.

The College's PUR process complies with the Board of Regents policy, as well as the Northwest Commission on College and Universities (NWCCU).

**TMCC Assessment & Planning Office.** Assessment of the degree and courses will be accomplished using guidelines established by the TMCC Assessment & Planning Office. The program will be assessed using the Program/Unit Review process, and specific courses assessed bi-annually using course assessment process established at TMCC.

The data gathered will be shared with the faculty and incorporated into the program assessment protocol for evaluation of rigor and relevance to students, business and industry, and the community. The assessment data will be shared with the advisory committee, faculty, department chair and dean on an annual basis. Input from students, graduates, and employers will be utilized to modify the program content and structure to drive changes to the degree in an effort to remain relevant to the community.

Assessment of student learning outcomes in areas of academic knowledge and understanding of program content will be based on examinations, assignments, portfolios, and projects within the specific subject areas.

Surveys will be conducted of students to evaluate curriculum relevance and delivery to determine if opportunities exist for improvement.

Surveys will be conducted of employers and industry specialists to evaluate curriculum relevance and to determine if opportunities exist for improvement.

All information will be evaluated to assure that program goals are congruent with student and industry needs.

**Summative Assessment.** Summative Assessment looks at the date form formative assessments. It looks at the "Big Picture." Summative is designed to evaluate outcomes, instead of looking at a student's development in a particular time. In turn, it is more quantitative. The summative process evaluates the end result that produces a grade. Two separate entities will assess the BArch program:

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- **National Architectural Accrediting Board (NAAB).** Assessment, accrediting, and monitoring of the degree will be performed by NAAB who develops standards and procedures appropriate for the education of architects. According the 2020 adopted procedures for accreditation, institutional evaluation will occur in three parts.
  - Institutional support and commitment to continuous improvement. This part addresses the commitment of the institution, its faculty, staff, and students to the development and evolution of the program over time.
  - Educational outcomes and curriculum. This part has four sections addressing the following:
    a. Student performance
    b. Curricular framework
    c. Evaluation of preparatory education
    d. Public information
  - Annual and interim reports. The program is required to submit annual statistical reports. The program must certify that all statistical data it submits to NAAB has been verified by the institution and is consistent with institutional reports to national and regional agencies, including the Integrated Postsecondary Education Data System of the National Center for Education Statistics.
- **Northwest Commission on College and Universities (NWCCU).** TMCC receives accreditation by the Northwest Commission on Colleges and Universities. Assessment focuses on the underlying course curriculum. Course assessment can be pictured as containing three vertical levels. The alignment strategy that begins at the top with the Program Outcomes, the middle level analyzes each Course Student Learning Outcome and the bottom layer ends with classroom Assignments.
  - **Top Layer.** Program Outcomes are "Big Picture" statements that guide and influence decisions "down the layers." Typically they are representative of industry standards and economic trends. They are assessed through Program Unit Reviews (five-year cycle). are assessed every four years through a process known as Course Improvement plans (CIP). It looks at the big picture:
    - Student Learning Outcomes are assessed every four years through the CIPs. They identify specific student grades that support each learning outcome. The summative assessment tool is used to evaluate student learning, skill acquisition, and knowledge at the end of a defined instructional period.
    - Assignments (bottom layer) are developed by the instructor for each course that is offered. By nature, they are very flexible and are considered as formative.
  - **Middle Layer.** Each course is evaluated via Course Improvement Plans (five-year cycle). It probes to ensure alignment with the Program Outcomes and any amendments to specific course Student Learning Outcomes.
    - Assessment method: Pre/post testing, standardized rubrics, etc.
    - Assessment data analysis: Instructors look for learning gains and areas of improvement.
    - Assessment closing the loop. After examining and discussing the aggregate CIP assessment results, instructors address any modifications to curriculum, pedagogy, student support (e.g. tutoring), and/or faculty support (e.g. professional development) are needed to improve student learning.
  - **Bottom Layer.** Individual lesson plans that support the Student Learning Outcomes are analyzed and modified as needed.
  - **Accountability**. Once all responses are completed, share this plan with the department, including the chair/director/coordinator, and with the dean.

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**D. Contribution and relationship of program objectives to**

    **i. NSHE Master Plan / Strategic Goals**

        **a. Access –** *Increase participation in postsecondary education*

           **1. Opportunities for Dual Enrollment:** TMCC and The Acadamey for Career Education (ACE), a tuition-free career and technical education charter high school have successfully created a dual enrollment program for students interested in Architecture.  TMCC's Jump Start Program is one of several programs that give current high school students the opportunity to earn college credit and high school credit by taking TMCC classes while completing their high school diploma.  Student's earn stackable industry recognized Skills Certificates that guide the transition between high school and TMCC.  Students are presented with further opportunities with a Drafting Certificate of Achievement, an Associate Degree in Architecture, and with this proposal a Bachelor Degree in Architecture.

           **2. Faculty Qualifications:** Highly trained faculty have implented year one of a three-year implimentation plan.  Fifteen students have chosen to enroll in the dual credit Architecture Program for Fall 2020.

           **3. School Support:** Ongoing coordination between TMCC and ACE are handeled via weekly meetings that discuss pedagogy, relevant computer software programs and purchases.

           An accredited bachelor degree pathway does not currently exist. The BArch will serve a vairiety of students with the first affordable route that fulfills state requirements and guides graduates towards licensure.

        **b. Success –** *Increase student success*

           **1. Muliple Learning Modalities.**  The Architecture program at TMCC currenlty offers a mix of online and face-to-face class modalities.  The continuation of years 3-5 will embrace online classes where practical.

           **2. Wide-Ranging Class Scheduling.** The Architecture program at TMCC currently offers wide-ranging class offering that are appealing to full and part-time students.  For example, a Fall offering may be scheduled in the morning while the same class will be offered in the evenings during the Spring semester.

           **3. Partnering with Local Industry on Curriculum Development.** The Architecture program currently seeks input from practicing professionals on areas of curriculum development, software/technology trends and simulated workplace learning environments.  A sub-committee of practing professionals has shaped the proposed curriclum as contained within.

           **4. Partnering with Local Industry with Internship Opportunities.**  The Architecture program currently has a vibrant relationship with practicing professionals.  Students will often work in an architctural office while attending school.

           **5. Intern Development Program (IDP).**  The "BArch Faculty" will work with the National Council of Architectural Registration Boards (NCARB), which provides a portal where students who start earning valuable experience may catalog their hours with NCARBs Intern Development Program.   Valuable intern hours will count towards licensure.  As a result, the time it takes to earn a license has gradually decreased and the average age of licensure continues to drop.

        *c.* **Close the Achievement Gap –** *Close the achievement gap among underserved populations* Where there are discrepancies in incomes among identifiable groups, TMCC has the obligation to seek remedies.  For example, the college is designated a Hispanic Serving Institution. This designation allows for the availability of Title III and Title IV federal funding.
Diversity, Ethnicity & Inclusion. TMCC Architecture 5-year snapshot 2015-2019 reflects:

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- 5.2% Asian: slight but steady growth trend from 2.5% (AY '15) to 5.2% (AY '19)
- 1.5% Black: slight declining trend from 2% (AY '15) to 1.4% (AY '18)
- 43% Hispanic: dramatic growth trend from 23% (AY'15) to 43% (AY '19)
- 47% Caucasian: decreasing growth trend from 63% (AY '15) to 47% (AY '19)

**TMCC's Architecture Program as compared to our community**

|  | Asian | Black | Hispanic | Caucasian | Female | Male |
|---|---|---|---|---|---|---|
| Reno/Sparks Community (1) | 5% | 2 % | 25% | 63% | 48.1% | 51.9% |
| TMCC Architecture (2) | 5.2% | 1.5% | 43% | 47% | 38% | 62% |

- (1) Data USA: Reno ,NV (2017)
- (2) TMCC Institutional Research Data Dashboard (F'2020)

**Close the Achievement Gap Summary:**
1. TMCC is serves as a vital educational resource to the Hispanic Community.
2. Students who delay college until they can afford to attend will be served by this program.
3. Students can remain employed as they complete this degree thus affording the opportunity to students who support themselves and others, the ability to complete a bachelor degree while maintaining life commitments.
4. The inclusive curriculum is welcoming and supportive of students from a variety of socio-economic, culturally, physically, and educationally-diverse backgrounds.
5. Students concerned about the rising costs of tuition, will have an affordable route to licensure through a BArch program.
6. Students who live in the area can stay in the area, enter the local workforce and not have to leave family or other obligations to earn a relevant bachelor's degree.
7. Prospective students are not priced out of the education market due to a lack of choice between bachelor's and master's programs.

d. **Workforce –** *Collaboratively address the challenges of the workforce and industry education needs of Nevada*

With the proposed BArch, TMCC remains focused by strengthening one of the existing, and growing, CTE programs. This bachelor's program is a niche program; no other accredited Bachelor of Architecture currently exists within NSHE. Through the use of existing institutional resources, this program will create a new and streamlined pathway for many Nevada residents to further their educational pursuits. The addition of the BArch will be a way to "grow our own" instructors as a growing workforce needs a growing number of educators to meet industry and accreditation standards, as well as NSHE educational requirements for instructors. The TMCC Advisory Board has continuously guided the program and at their behest, postsecondary skill sets were created to align with workforce needs. In addition, TMCC's Architecture program has:

1. Grown a strong network of business partners and local employers as their first choice in hiring.
2. Built a nationally recognized reputation for service-based learning projects that create and connect businesses partners with student career opportunities.
3. Fostered relations with area Middle and High Schools and created degree pathway maps and articulation agreements.
4. Created job shadowing and internship opportunities for High School and College students.
5. Created non-credit workforce development classes that respond to employer training needs.

Aside from a career in architecture, a student with a B.Arch. degree may find alternative career pathway opportunities. These include:
- Construction Management (DETR SOC: 11-9021)

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- o Software Design / Developers, Applications (DETER SOC: 15-1132)
- o Commercial & Industrial Design (DETR SOC: 27-1021)
- o Graphic Designer (DETR SOC: 27-1024)
- o Web Developers (DETR SOC: 15-1134

Upon award of a degree, student will be prepared to enter the workforce.

The key strengths of the BArch proposal include:

**1) Curriculum:** Our proposed program offers a high-value area of study not currently found in Nevada. While the University of Nevada at Las Vegas offers a Bachelor of Science in Architecture, no postsecondary institution in our state offers an accredited Bachelor of Architecture degree.
**2) Licensure:** The Nevada licensing board finds significant value in and need for two accredited architecture programs, particularly given the ongoing expansion of industry in northwest Nevada.
**3) Career and Technical Education / STEM:** Our proposed BArch aligns with the Nevada Governor's economic development plan to foster programs that equip workers with the skills needed by employers.
**4) Access:** TMCC offers vital access to higher education for Nevada's underserved populations, presenting urgently-needed opportunities to close our equity gap in training and licensed professions.

e. **Research – *Co-develop solutions to the critical issues facing 21$^{st}$ century Nevada and raise the overall research profile***
Nevada's economy continues to grow.  With exponential growth comes issues with municipal infrastructure, housing shortages, workforce readiness, and environmental impacts, as well as the social impacts of an increase in a culturally diverse population.

These pressing concerns are the building blocks that will shape the B.Arch. curriculum and in turn create definable and distinct fields of study that address the needs of future job markets.

There will be two main pedagogical themes embedded within the B.Arch. curriculum: (1) Human Societies placed on Earths Systems as represented by "Integrated Design Studios I & II and (2) Architecture of Inclusion as represented by "Integrated Design Studio III.

As quoted from the State of Nevada Advisory Council on STEM, 2017 Strategic Plan "Those who have a solid foundation in real-world problem solving and experimentation, the bedrock of a rigorous STEM education, become confident, critical thinkers with the creativity to find solutions to the challenges they face."  In parallel, TMCC's architecture curriculum will be viewed as a laboratory and be committed to industry partners that will inform and shape the learning outcomes.  The following community partners are as follows:

While TMCC's B.Arch. students main focus is "workforce readiness," there are creative ways to leverage the research capacities within NSHEs institutions.
**Examples within the NSHE system:**
**1. UNR.**  Current conversations with UNRs College of Engineering Chair, Dr. Krishna Pagilla view the B.Arch. as an opportunity for collaboration.  Recent conversations with Dr. Anne Nolin, UNR's College of Science – The Mackay School of Earth Sciences & Engineering view a robust and meaningful partnership.  Partnering opportunities include assignment collaboration, guest lectures and field trips.  Research topics include the interfaces between the built environment and hydrologic systems and fragile ecosystems.

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**2. DRI.** Current conversations with DRIs Peter Ross, Assistant Vice President of Campus Planning and Physical Plant, realize research opportunities with design problems that:
- o Revitalize communities and change perceptions
- o Prioritize building energy performance within the national discussion of climate change, and renewable energy research.
- o Computational Research and Visualization Building, a LEED case study, completed on the Reno campus in 2009. Powered by solar arrays, this case study provides learning opportunities for renewable energies and sustainable building design.

**3. UNR Cooperative Extension Service:** Current conversations Jamie Roice-Gomes express the importance of how to plan and retrofit a home to withstand wildfires.

**Examples outside the NSHE system:**

**1. One Truckee River** – Correspondences to date address opportunities to promote and protect water quality and ecosystem health of the Truckee River. Projects being discussed include a river corridor vegetative management plan and enhancement plans that address safety, public access and educational opportunities.

**2. Tahoe Regional Planning Agency** – Correspondences to date have addressed learning opportunities that address multi-agency regulations associated with development, and in particular, emerging trend lines that include affordable housing, fire disaster prevention techniques, and suitable materials balanced with the scenic qualities of the Tahoe Region.

**3. Black Rock Design Institute** – A nonprofit organization that fosters public interest, professional education, and community outreach has found the significance and relevancy with TMCC's proposed BArch

**4. Nevada State Board of Landscape Architects** – TMCC has a long-standing history of graduating landscape architecture students and has enjoyed a strong partnership that has prepared graduating students to become Landscape Architects in Training (LAIT). A LAIT may sit for certain sections of the Landscape Architectural Registration Exam. Board presentation comments are favorable towards the strong representation of courses that embrace our natural systems.

**5. Nevada State Board of Architecture, Interior Design and Residential Design** – "Please apprise the Nevada System of Higher Education Board of Regents that the Nevada State Board of Architecture, Interior Design and Residential Design is in full support of TMCC's proposed five-year Bachelor of Architecture with the following findings:"
- o Career and Technical Education. Supports the Governor's Office of Economic Development by strengthening Career and Technical Educational and STEM pathways in Nevada.
- o Licensure. NSBAIDRD finds the value and need for two NAAB-accredited architecture programs within Nevada.
- o Curriculum. TMCC's BArch curriculum proposes high value areas of study that are currently not in place.
- o Access. Encourages access to Nevada's underserved populations that is expedient and affordable.
- o Student Choice. Creates a new opportunity for student choice, towards the proposed accredited BArch or an existing Master of Architecture within Nevada.
- o Protection of the Public Health, Safety, and Welfare. Having an accredited program of architecture at TMCC will further enhance the protection of the public health, safety and welfare. Graduates of the TMCC proposed architectural program will have the opportunity to obtain licensure upon graduation by the architecture program's proposed participation in the NCARB Integrated Path to Architectural Licensure (IPAL) option.

**6. American Society of Landscape Architects, Northern Section** – Support for the proposed BArch can be found by a strong curriculum proposal that fosters the stewardship of healthy, equitable, safe, and resilient environments with equity and inclusion.

**7. Truckee Meadows Regional Planning Agency (TMRPA)** – "As it pertains to TMCC's Bachelor of Architecture proposal and the community partnership with the TMRPA, we

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acknowledge the importance of educating our local workforce.  In particular, as emerging trend lines include land-use facilitation, infrastructure and resource management conversations among public and private decision makers.

**8. Nevada Department of Education** – Conversations with Andre DeLeon, Education Programs Professional, intend to collaborate our curriculum with the Nevada Academic Content Standards for Science (NVACSS) with the interim step of creating a crosswalk between curriculum content and Science Standards.

**9. Partners informing and shaping curriculum:**

| | 7TH SEMESTER |
|---|---|
| 6 credits | AAD 4XX INTEGRATED DESIGN STUDIO I (BIOMES \| WATERSHED STUDIO) |
| 3 credits | AAD 4XX STAKEHOLDER IN ARCHITECTURE |
| 3 credits | AAD 4XX PROFESSIONAL PRACTICE |
| 3 credits | ELECTIVE |
| | 8TH SEMESTER |
| 6 credits | AAD 4XX INTEGRATED DESIGN STUDIO II (EARTHQUAKE \| CARBON NEUTRALITY \|WILDLAND FIRE STUDIO) |
| 3 credits | AAD 4XX INTERIOR DESIGN STUDIO |
| 3 credits | AAD 4XX PROJECT MANAGEMENT |
| 3 credits | ELECTIVE |
| | 9TH SEMESTER |
| 6 credits | AAD 4XX INTEGRATED DESIGN STUDIO III (INCLUSIVE DESIGN & CULTURAL BELIEFS STUDIO) |
| 3 credits | AAD 4XX THEORY AND URBAN DESIGN |
| 3 credits | AAD 4XX POFESSIONAL PRACTICE II |
| 3 credits | ELECTIVE |

**Community Partners**
UNR Hydrology, DRI, TRPA, One Truckee River, Department of Ed.

UNR Engineering, UNR "Living w/ Wildfire", Truckee Meadows Regional Planning Authority,

City of Reno, Silver State Fair Housing Authority, Black Rock Design

**Overarching Partners:**
Nevada State Board of Architects, Interior Design, Residential Design

**10. Curriculum Buildout**

| Credits | BARCH |
|---|---|
| **1ST SEMESTER** | |
| 3 credits | ENG 101 COMPOSITION I |
| 3 credits | AAD 101 DESIGN WITH NATURE |
| 3 credits | AAD 180 DESIGN FOUNDATION I |
| 3 credits | AAD 181 DESIGN FOUNDATION – DISCUSSION |
| 3 credits | MATH 126 PRE-CALCULUS I |
| **2ND SEMESTER** | |
| 3 credits | AAD 125 CONSTRUCTION DRAWINGS AND DETAILING |
| 3 credits | AAD 223 GRAPHIC SOFTWARE FOR ARCH, CONST, DSGNR, PLANNERS |
| 3 credits | AAD 280 FUNDAMENTALS OF ARCHITECTURE DESIGN I |
| 3 credits | CONS 120 PRINT READING AND SPECIFICATION |
| 3 credits | US & NV CONSTITION |
| **3RD SEMESTER** | |
| 3 credits | AAD 201 HISTORY OF THE BUILT ENVIRONMENT |
| 3 credits | AAD 265 COMPUTER APPLICATIONS IN ARCHITECTURE I |
| 3 credits | AAD 282 FUNDAMENTALS OF ARCHITECTURE DESIGN II |
| 3 credits | ENG 102 COMPOSITION II |
| 3 credits | PHY 100 INTRODUCTION TO PHYSICS |
| **4TH SEMESTER** | |
| 3 credits | AAD 230 DESIGN WITH NATURE |
| 3 credits | AAD 2XX TOPO FORM & DESIGN TECHNOLOGY |
| 3 credits | 3XX INTRODUCTION TO LAND PLANNING |
| 3 credits | ELECTIVE FINE ARTS |
| 3 credits | GEOL 100 EARTHQUAKES, VOLCANOES AND NATURAL DISASTERS |
| **5TH SEMESTER** | |
| 3 credits | AAD 3XX REVIT STUDIO |
| 3 credits | AAD 3XX STRUCTURAL SYSTEM I |
| 3 credits | AAD 3XX CONSTRUCTION MATERIALS |
| 3 credits | CONS 111 BUILDING CODES |
| 3 credits | AAD 3XX ENVIRONMENTAL CONTROL SYSTEM I |
| **6TH SEMESTER** | |
| 3 credits | AAD 3XX DIGITAL STUDIO |
| 3 credits | AAD 3XX ENVIRONMENTAL CONTROL SYSTEM II |
| 3 credits | AAD 3XX STRUCTURAL SYSTEM II |
| 3 credits | CONS 121 PRINCIPLES OF CONSTRUCTION ESTIMATING |
| 3 credits | ELECTIVE |
| **7TH SEMESTER** | |
| 6 credits | AAD 4XX INTEGRATED DESIGN STUDIO I (BIOMES \| WATERSHED STUDIO) |
| 3 credits | AAD 4XX STAKEHOLDER IN ARCHITECTURE |
| 3 credits | AAD 4XX PROFESSIONAL PRACTICE |
| 3 credits | ELECTIVE |
| **8TH SEMESTER** | |
| 6 credits | AAD 4XX INTEGRATED DESIGN STUDIO II (EARTHQUAKE \| CARBON NEUTRALITY \|WILDLAND FIRE STUDIO) |
| 3 credits | AAD 4XX INTERIOR DESIGN STUDIO |
| 3 credits | AAD 4XX PROJECT MANAGEMENT |
| 3 credits | ELECTIVE |
| **9TH SEMESTER** | |
| 6 credits | AAD 4XX INTEGRATED DESIGN STUDIO III (INCLUSIVE DESIGN & CULTURAL BELIEFS STUDIO) |
| 3 credits | AAD 4XX THEORY AND URBAN DESIGN |
| 3 credits | AAD 4XX POFESSIONAL PRACTICE II |
| 3 credits | ELECTIVE |
| **10TH SEMESTER** | |
| 3 credits | GRC 294 PORTFOLIO |
| 12credits | AAD 45X THESIS STUDIO |
| **150 CR** | |

## 11. Curriculum Mapping

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**Attainment Levels:**

| Introduced / Practiced | Practiced / Reinforced | Reinforced / Demonstrated | Demonstrated / Mastery |
|---|---|---|---|
| 🟩 Green | 🟨 Yellow | 🟧 Orange | 🟥 Red |

| CREDITS | Year / Semester / Courses | PLO #1 — Recognize the ability to describe and develop design solutions as it pertains to environmental, social equity and cultural topics. | PLO #2 — Develop, Recognize and apply technical skills as it pertains to building practices. | PLO #3 — Recognize the ability to describe and develop integrative architectural design solutions. | PLO #4 — Discuss, differentiate and evaluate the professional practice of architecture. |
|---|---|---|---|---|---|
| | **YEAR 1 FALL — 1ST SEMESTER** | | | | |
| 3 | AAD 101 DESIGN WITH NATURE | 🟩 | | 🟩 | 🟩 |
| 3 | AAD 180 DESIGN FOUNDATION I | 🟩 | | | |
| 3 | AAD 181 DESIGN FOUNDATION – DISCSSN | 🟩 | | | |
| | **YEAR 1 SPRING — 2ND SEMESTER** | | | | |
| 3 | AAD 125 CONST. DRAWINGS & DETAILING | | 🟩 | | |
| 3 | AAD 223 GRAPHIC SOFTWARE FOR ARCH, CONST, DSGNR, PLANRS | 🟩 | 🟩 | | |
| 3 | AAD 280 FUNDAMENTALS OF ARCH. DESIGN I | 🟩 | 🟩 | 🟩 | |
| 3 | CONS 120 PRINT READING AND SPECS | 🟩 | 🟩 | 🟩 | |
| | **YEAR 2 FALL — 3RD SEMESTER** | | | | |
| 3 | AAD 201 HISTORY OF THE BUILT ENVIRONMNT | 🟩 | | 🟩 | 🟩 |
| 3 | AAD 265 COMPUTER APPS IN ARCHITECTURE I | 🟩 | 🟩 | 🟩 | |
| 3 | AAD 282 FUNDAMENTLS OF ARCH. DESIGN II | 🟩 | 🟩 | | |
| | **YEAR 2 SPRING — 4TH SEMESTER** | | | | |
| 3 | AAD 2XX TOPO FORM & DESIGN TECHNOLOGY | 🟩 | 🟩 | 🟩 | 🟩 |
| 3 | AAD 230 DESIGN W CLIMATE | 🟩 | 🟩 | 🟩 | 🟩 |
| 3 | 3XX INTRODUCTION TO LAND PLANNING | 🟩 | | 🟩 | |
| | **YEAR 3 FALL — 5th SEMESTER** | | | | |
| 3 | AAD 3XX REVIT II STUDIO | 🟨 | 🟨 | 🟨 | |
| 3 | AAD 3XX STRUCTURAL SYSTEM I | | 🟩 | | 🟩 |
| 3 | AAD 3XX CONST. MATERIALS | | 🟧 | | |
| 3 | CONS 111 BLDNG CODES | | 🟩 | | |
| 3 | AAD 3XX ENV. CONTROL SYSTEM I | 🟨 | | 🟨 | 🟨 |
| | **YEAR 3 SPRING — 6TH SEMESTER** | | | | |
| 3 | CONS 121 PRINCIPLES OF CONST. ESTIMATING | | 🟩 | | 🟩 |
| 3 | AAD 3XX STRUCTURAL SYSTEM II | | 🟨 | | 🟨 |
| 3 | AAD 3XX DIGITAL STUDIO | 🟨 | | | |
| 3 | AAD 3XX ENV. CONTROL SYSTEM II | 🟧 | 🟧 | | |
| | **YEAR 4 FALL — 7th SEMESTER** | | | | |
| 6 | AAD 4XX INTEGRATED DESIGN STUDIO I | 🟧 | 🟧 | 🟧 | |
| 3 | AAD 4XX STAKEHOLDERS IN ARCHITECTURE | 🟧 | | 🟧 | 🟧 |
| 3 | AAD 4XX PROFESSIONAL PRACTICE I | | | 🟧 | 🟧 |
| | **YEAR 4 SPRING — 8TH SEMESTER** | | | | |
| 6 | AAD 4XX INTEGRATED DESIGN STUDIO II | 🟧 | 🟧 | 🟧 | |
| 3 | AAD 4XX INTERIOR DESIGN STUDIO | 🟧 | | | 🟧 |
| 3 | AAD 4XX PROJECT MANAGEMENT | 🟧 | | | 🟧 |
| | **YEAR 5 FALL — 9TH SEMESTER** | | | | |
| 6 | AAD 4XX INTEGRATED DESIGN STUDIO III | 🟧 | 🟧 | 🟧 | |
| 3 | AAD 4XX PROFESSIONAL PRACTICE II | | | 🟥 | 🟥 |
| 3 | AAD 4XX THEORY AND URBAN DESIGN | 🟧 | | 🟧 | 🟧 |
| | **YEAR 5 SPRING — 10TH SEMESTER** | | | | |
| 3 | GRC 4XX PORTFOLIO | | 🟧 | | |
| 6 | AAD 4XX THESIS STUDIO I | 🟥 | 🟥 | 🟥 | 🟥 |
| 6 | AAD 4XX THESIS STUDIO II | 🟥 | 🟥 | 🟥 | 🟥 |

**Institutional mission and core themes**

Truckee Meadows Community College promotes student success, academic excellence, and access to lifelong learning by supporting high-quality education and services within our diverse community.

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The B.Arch. degree will contribute to TMCC's mission by:
- Dual enrollment. The Academy for Career and Education (ACE) high school students receive dual credit via TMCC's Jump Start Program.
- Stackable Skills Certificates with a Certificate of Achievement will provide a ladder of learning towards the existing Associates Degree in Architecture and the proposed BArch
- Diversity, Equity and Inclusion (DEI) numbers more than mirror the serving community.
- TMCC is a designated Hispanic Serving Institution, as reflected by the high DEI institutional research data.
- Flexible course offerings accommodate full time students and working students.
- High school STEM knowledge is continued to a higher level.
- CTE framework prepares students for the most efficient and economical path towards state licensing requirements.
- Academic excellence is achieved through accountability by community partners that inform and shape the curriculum.

**TMCC Core Theme I: Student Success**
- Objective 1: Improve successful completion of students' educational goals, including graduation, pathways to licensure, early Architectural Registration Exam opportunities and employment with local professionals.
  - o The accredited BArch fulfills Nevada's licensing requirements.
- Objective 2: Provide high-quality student support through library resources, tutoring, advising, and information services.
  - o Advising will play a large role in students navigating the path to BArch completion and can encourage and motivate students because of the BArch availability.
- Objective 3: Provide Student engagement opportunities that build interpersonal, intrapersonal, and practical skills.
  - o This is addressed by courses in the program focused on personal and collaborative projects and community service learning scenarios.
  - o The BArch degree will increase opportunities for higher levels of educational experience.

**TMCC Core Theme II: Academic Excellence**
- Objective 1: Maintain and improve the quality of course, general education, and program offerings through systematic assessment and review.
  - o Program courses and offerings will be reviewed annually by a national third-party entity – National Architectural Accrediting Board.
  - o Program courses and offerings will be reviewed by TMCC's Program Unit Reviews.  Reporting/review is completed on a 5-year revolving cycle.
- Objective 2: Offer high-quality programs that meet the workforce educational needs of our community.
  - o High level courses as assessed at TMCC, NWCCU, and by the NAAB ensures quality and relevancy to workforce needs.  Providing a clear pathway for growth and towards licensure will encourage prospective students to pursue career programs.  The proposed curriculum emphasizes workforce readiness via new course listings and leveraging TMCC's existing CTE programs.  Those completing the BArch will be well positioned and prepared for the path to obtaining a license to practice architecture.
  - o  Architectural Advisory Board Meetings meeting twice annually.  The pace of change requires that we review our curriculum and practices often to make sure they are relevant and meet employer's expectations.  TMCC's BArch Program

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will serve the employers in our region; therefore, TMCC actively seeks their input to better meet the needs of students and the industry.

- Objective 3: Create a learning environment that promotes academic growth for a diverse student population.
    - Student diversity in architecture is important because it will allow architects to truly be a part of the communities they are designing for.
    - Architecture ties our communities and each of us to the other. Architecture touches everything – health, wellness, education, history, culture, and beauty. It reflects who we are. To grow a robust and valued profession prepared to serve the needs of people young and old, rich and poor—all hungry for better communities, better infrastructure, and better lives— our profession requires talents as diverse as life itself.
    - TMCC's current DEI data reflects a strong mirror to the community it serves as illustrated above.
- Objective 4: Nurture and celebrate a culture of intellect and professional growth among faculty and staff.
    - TMCC's architecture program believes in layered growth through a **creative** defensible **process** that refines and shapes the ideas of **curious people**.
        - **Creativity** is not always well understood. It embraces originality and makes unique connections between different ideas. It is an ability to make connections and to think in visual terms.
        - **Process** can be and is often of a non-linear nature. Road maps create a visual process that suggests a strategy for problem solving. The process diagram within will explore: Data, Awareness, Analysis, Brainstorming, Alternatives and Feedback.
        - **Curious** people have an almost physical craving to learn and it is strongly associated with grit. Grit is a good predictor of long-term success. Curiosity improves service because a "one size fits all" is far too common. Being curious about the people you serve helps you treat each person as a unique individual with their own context, goals, challenges and skill.
        - **People** complement the gritty nature of curiosity by adding color and texture. An appreciation of diversity goes hand-in-hand with a just and equitable society. This applies to the teaching faculty, students in the classroom, and the people that inhabit our built environment. The learning atmosphere instills the principle that we serve the people around us. Without them you are left with a generic box that can be placed on any community corner within any city. Void of context, emotion and identity. A well-executed philosophy of service will serve well the people in the communities that we live in.

    - The B-Arch will expand the need for leaders and trainers and this program will create opportunities for BArch graduates to become faculty members, or, to help faculty meet accreditation requirements.

**TMCC Core Theme III: Access to Lifelong Learning**
- Objective 1: Maintain and improve the quality of course, general education, and program offerings through systematic assessment and review.
    - Program courses and offerings will be data driven with assessment of need and effectiveness at the apex of curriculum structure.
- Objective 2: The B-Arch extends the learning trajectory from a two-year associates degree to a five-year B-Arch. which will create the fastest and most affordable pathway to licensure.

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- Objective 3: Encourage alumni to engage, contribute, and support this BArch Program.
  - Involve graduates of the BArch degree to return to the college as instructors, serving on an advisory board, or in other alumni related activities.

**Core Theme IV: Stewardship of Resources**
- Objective 1: The proposed curriculum builds upon existing course and in turn minimizes the need for new listings and part-time instructors.
- Objective 2: Maintain and grow non-state-funded revenue streams
  - Local professionals may see need for sustained program commitment and show their support with monetary or equipment donations.
- Objective 3: Maintain or improve the effectiveness and efficiency of College operations.
  - This program will utilize the existing classrooms. No additional space is projected at this time.
- Objective 4: Optimize state-funded revenue; the proposal optimizes existing classrooms, computers and supplies.

ii. **Campus strategic plan and/or academic master plan**
The BArch degree will address TMCC's vision by creating a pathway for graduates of an Associate program to segue into a Baccalaureate degree providing graduates with additional skills in teaching, training, leadership, and management that can change their lives by opening the door to a streamlined pathway to licensure.

The implementation of this degree will be one more tool that TMCC can use to promote student access and success, and excellence in teaching and learning. TMCC's central location to neighboring states not offering accredited BArch Programs, coupled with TMCC's resulting degree training, nurtures a climate of innovation and creativity that will open opportunities for many students who dared not dream of earning a Bachelor's degree. Students with varied socio-economic and culturally diverse backgrounds can earn a degree as they continue to work, strengthening the bond between TMCC and industry.

This degree is innovative and is being developed for graduates who have earned an associate degree to continue their education. It will also serve as a recruitment tool for students who need to reach goals that motivate them to persist to the next step.

iii. **Other programs in the institution**
TMCC currently offers five baccalaureate degrees: Emergency Management and Homeland Security, Logistics Operations Management, BAS CTE, BAS in Cyber Physical Manufacturing, and Dental Hygiene. These and other disciplines are supportive and anticipate future collaboration with students in the BArch program.

iv. **Other related programs in the System**
There are no other NAAB accredited BArch programs as required by Nevada's Revised Statutes. The accredited BArch provides the fastest and most affordable route towards meeting one of the crucial architectural licensing steps.

Upon completion of a BArch at TMCC, a student may choose to transfer to UNLV for NAAB accredited Master of Architecture.

Seamless transfer agreements will always be encouraged and pursued.

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v. **If the program was not included in the NSHE Planning Report, please explain why.**
The Bachelor of Architecture can be found on page 51 of the 2021-2025 Planning Report

C. **Evaluation of need for the program**

i. **The need for the program and the data that provides evidence of that need**
Architects are charged with safeguarding the health, safety and welfare of the general public. The Nevada Revised Statutes (NRS) section 623 states the purpose of practicing architecture is "to safeguard life, health and property, and to promote public welfare by improving the quality of human environmental design" (NRS 623.010). The Governor creates and appoints members to a state regulatory board (NRS 623.050). The regulatory board enforces the provisions of the Nevada Revised Statutes. Per the Nevada Revised Statutes (NRS), the state regulates both the professional "Title" and "Practice" of architecture.

Accredited architectural education by NAAB is required by law in Nevada.

**The world's most urgent mission.** As many traditional building practices contribute towards the irreversible effects of climate change, workforce ready students are essential. Graduating architectural students, prepared to solve climate change issues, will be critical meeting the 2050 Climate Action Plan – working towards a world with net-zero greenhouse gas emissions.

**Reciprocity.** With so few accredited B. Arch programs in the Western U.S. jurisdictions, TMCC's central location can provide an important role in servicing students in our neighboring states. Most architects are licensed to practice in more than one jurisdiction, which can expand career opportunities for graduating students. The flexibility and security of this can be accomplished through reciprocity, and agreement among the 55 U.S. jurisdictions – to recognize licenses issued by other boards.

**TMCC uniquely positioned.** While this program is focused on serving the needs of students and communities in Northern Nevada, a BArch in Reno, Nevada would be centrally located to serve students across the Mountain West and Pacific Northwest regions. Access to accredited programs is very limited west of the Continental Divide, as illustrated below:

**Western U.S. Accredited B. Arch Programs – Public Institutions.**

| No. | NAAB ACCREDITED B. Arch \| PUBLIC INSTITUTIONS | QTY |
|---|---|---|
| 1 | Washington | 0 |
| 2 | Idaho | 0 |
| 3 | Montana | 0 |
| 4 | Wyoming | 0 |
| 5 | Utah | 0 |
| 6 | Colorado | 0 |
| 7 | Nevada | 0 |
| 8 | New Mexico | 0 |
| 9 | Arizona (University of Arizona, Tucson AZ) | 1 |

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| | 10 | California (CA Polytechnic State University, San Luis Obispo)<br>California (CA State Polytechnic University, Pomona)<br>California (S.CA Institute of Arch., Los Angeles)<br>California (S.CA University School of Arch., Los Angeles)<br>California (Woodbury U. School of Arch., Burbank)<br>California (Woodbury U. School of Arch., San Diego) | 6 |
| | 11 | Oregon (University of School of Arch., Eugene) | 1 |

### ii. Student population to be served

TMCC's BArch student population has three identifiable pathways:

1. K-12 students from the eight (8) area high schools. Students interested in Science, Technology, Engineering, Mathematics, Art, CTE programs, Music, English and Science have shown interest in becoming architects.

2. ACE Charter School. TMCC and ACE Charter School have formed an alliance by establishing an architecture program. The program is located at ACE and instructional lesson plans are taught by a TMCC instructor.

3. Non-traditional students. Many returning students who may have already received a degree or have delayed their goal would contribute to the enrollment populations.

### iii. Procedures used in arriving at the decision to offer the program

1. Identify equity and economic mobility concerns. Many students, especially in underserved groups and communities, lack access to an affordable, high-quality education. Add to this, TMCC students are currently faced with the costs associated with transferring either to UNLV (with additional years of un-necessary schooling) or to an out of state accredited institution.

**2a. Undergraduate Tuition and Fees (Under Graduate defined as years 1 & 2 of a 5 year B.Arch. program)**

| | | Tuition/Fees (annual) | Tuition/Fees (annual) | 2yr. Est. (6) | 2yr. Estimate |
|---|---|---|---|---|---|
| | Institution (Instn.) | In-state (2) | Out-of-State | In-state | Out-of-State |
| - | "Generic Instn." (1) | $9, 970 | $34,740 | $19,940 | $47,480 |
| NV | UNR (3) | $7,599 | $22,236 | $15,198 | $44,472 |
| NV | UNLV (4) | $7,985 | $23,132 | $15,970 | $46.264 |
| NV | TMCC (5) | $3,637.50 | $11,114.50 | $7,275.00 | $14,550.00 |

- (1) "Generic Institution" representing the national average. source: Designer Hacks (2020), (2) 5yr B.Arch. Program – Undergraduate years 1&2 at 60 credits (30 credits/year), (3) UNR undergraduate tuition and fees (2018-2019), (4) UNLV undergraduate tuition and fees (2018-2019)
- (5) TMCC undergraduate tuition and fees http://catalog.tmcc.edu/tuition-fees/#text (2020-2021)
- (6) 30 credits annually

**2b. Upper Level Tuition and Fees (Graduate defined as years 3, 4 & 5, of a 5 year B.Arch. program)**

| | | Tuition/Fees (annual) | Tuition/Fees (annual) | 3yr. Estimate | 3yr. Estimate |
|---|---|---|---|---|---|
| | Institution (Instn.) | In-state (2) | Out-of-State | In-state | Out-of-State |
| - | "Generic Instn." (1) | $30-$40,000 (1a) | n/a | $90-120,000 | n/a |
| NV | UNR (3) | $10,206 (3a) | $29,566 (3b) | | |
| NV | UNLV | $9,418 (4a) | $25,483 (4b) | $28,254 | $76,450 |
| NV | TMCC (5) | $5,685 | $13,162 | $17,055 | $39.486 |

3. Identify TMCC's strength of serving under representative communities. TMCC is designated as a Hispanic Serving Institution. Institutional data research supports that the architectural program has strong Hispanic representation.

4. Identify gaps in TMCC's ability to provide workforce ready architectural students. With a field so broad such as architecture, more time is necessary to properly prepare students to be workforce ready.
5. Leveraging existing resources.  The BArch curriculum recognizes the valuable assets of community partners and existing NSHE research opportunities in place at UNR and DRI.
6. Climate action. To meet the World's goal of carbon neutrality by 2050, knowledgeable and prepared students will be in high demand.

**iv. Organizational arrangements required within the institution to accommodate the program**
This program will utilize the existing classrooms. No additional space requirements are projected at this time.

One full-time and one part-time instructor will be added, both possess at least a Master's Degree to be qualify to teach at the baccalaureate degree level.

**v. The timetable, with dates, for implementation steps**
This program will stack on the Construction and Design Associate of Applied Science – architecture emphasis.
The first two semesters of the upper division (B.Arch.) program will be implemented in the 2022-2023 academic year. The second two semesters will follow and be implemented first in the 2023-2024 academic year. The third and final two semesters will follow and be implemented in the 2024-2025 academic year.

**vi. If this or a similar program already exists within the System, what is the justification for this addition? Please describe the nature and extent of the consultation with other institutions that have similar programs.**
1. There are no other existing NAAB accredited Bachelor of Architecture programs in Nevada.
2. There is a similar Bachelor of Science degree in architecture at UNLV.  However it does not meet educational state licensing requirements.  UNLV has not indicated a current or future desire to accredit the existing BAS.
3. There is an existing NAAB accredited Master of Architecture program at UNLV that meets educational state licensing requirements.
4. Extent of consultation with UNLV.  To date, UNLVs M. Arch. model does not support an accredited BArch.  In addition, UNLV Interim Chair of Architecture does not support TMCC's BArch proposal.   They have historically experienced a growth rate of 1% per year and they feel that the State of Nevada cannot support two accredited programs.

**vii. Evidence of employment opportunities for graduates (state and national).  Include information on institutional review of the need for the program based on data from the Nevada P-20 Workforce Research Data System and/or any other applicable sources.**

**Graduates – NSHE Institutional Research Office.**  Fall 2019 data reports 19 UNLV M. Arch. graduates.  Fall 2012 (most recent) reports an average time 9.5 semesters for a UNLV student to complete a non-accredited Bachelor of Science in Architecture.  Continuing students must then complete an additional 4 semesters towards an accredited M. Arch. degree.

**Graduates – ACSA Institutional Data Report.** The Association of Collegiate Schools of Architecture report the Mountain Region (Nevada included) "… boasts the highest on-time graduation rates for BArch programs.  The report also finds a steady M. Arch. enrollment decline from 2009 – 2017.

**NPWR.** Utilizing the Nevada P-20 to Workforce Data System (NPWR):
CTE Graduates by CTE Status – Architecture & Construction: Concentrator 7.3%, Completer 8%, Certificate Earners 8.5% (http://npwr.nv.gov/reports/career-and-technical-education-concentrator-graduates-report/ )

**EmployNV** (Official Site of the State of Nevada, 2021) https://www.employnv.gov/vosnet/Default.aspx
1. Architecture: 1,340 job listings in NV
2. Construction Management: 197 job listing in NV
3. Software Design: 196 job listings in NV
4. Software Developers: 89 job listings in NV
5. Commercial & Industrial Design: 5 job listings in NV
6. Graphic Designer: 22 job listings in NV
7. Planners: 113 job listings in NV
8. Web Developers: 74 job listings in NV

**EmployNV.** Lists Architectural, Engineering and Related Services – "This industry comprises establishments primarily engaged in planning and designing residential, institutional, leisure, commercial, and industrial buildings and structures by applying knowledge of design, construction procedures, zoning regulations, building codes and building materials."  Projection forecasts a growing outlook.

**The Governor's Office of Workforce Innovation (OWINN).**  "… OWINN is aligned with the U.S. Workforce Innovation and Opportunity Act's (WIOA) vision of a seamless workforce system that helps job seekers access employment, education, training … and is aligned to the …. mission of a 'New Nevada'…".  Published OWINN document: "In – Demand Occupations: Leveraging Labor-Market Data with Industry Insights to Strategically Align Nevada's Education and Workforce" pdf.  pgs. 5-11.
1. Architecture and Engineering Managers (SOC 11-9041) Total openings due to growth and replacements by 2024: **510 anticipated jobs**. Bachelor's Degree minimum.
2. Construction Management – Not easily identifiable from listings
3&4. Software Design/Developers (SOC 15-1132): Total openings due to growth and replacements by 2024: **1,350 anticipated jobs.** Bachelor's Degree minimum.
5-7. Not
8. Computer & Information Systems Managers (SOC 11-3021) Total openings due to growth and replacements by 2024: **530 anticipated jobs.** Bachelor's Degree minimum.

**OWINN.** "In-Demand Occupations: Leveraging Labor-Market Data with Industry Insights to Strategically Align Nevada's Education and Workforce" pdf.  pg12. "When examining the typical entry-level education… approximately 34% of the in-demand occupations will require a bachelor's degree. However, what is equally important is that only 10% … will require a Master's degree…".

**OWINN.**  "In-Demand Occupations: Leveraging Labor-Market Data with Industry Insights to Strategically Align Nevada's Education and Workforce" pdf.  pgs. 13-14 – Table 2.  "… provides an overview of the top occupations within all eight industry sectors that employers identified from the labor market data presented by the Governor's Office of Economic Development (GOED) and DETER…"  Table 2 identifies the following:

| Occupation | Aerospace | Information Technology | Construction | Health & Medical | Manu. & Logistics | Mining & Materials | Natural Resources | Tourism, Gaming, Entertainment | Count |
|---|---|---|---|---|---|---|---|---|---|
| Analysts and Marketing Specialists | | | | | | | | | |
| Network and Computer Systems Administrators | | X | | X | X | | X | X | 5 |
| Inspectors, Testers, Sorters, Samplers, and Weighers | X | | | | X | X | X | | 4 |
| Maintenance and Repair Workers, General | | | X | | | X | X | X | 4 |
| Industrial Production Managers | X | | | | X | X | X | | 4 |
| Architectural and Engineering Managers | X | X | | | X | | X | | 4 |

The 4/5 ranking is just below 7 occupations with a 5/7 and the top occupation: First-Line Supervisors of Mechanics, Installers, and Repairers with 6/7.

**Nevada Governor's Office of Economic Development (GOED).** Typical entry level education is a Bachelor's degree and training as Internship/residency. There were no recorded scores of 7/8 or 8/8.  GOED's 2017 findings (latest update):
- Architecture ranked at 120 out of 785 high demand occupations (HDO) in NV.  550 jobs listed. Bachelor's degree required.
- Software Developers / Systems Software ranked 10/785 HDO in NV.  1,130 jobs listed. Bachelor's degree required.
- Computer Network Architects ranked 37/785 HDO in NV. 622 jobs listed. Bachelor's degree required.

**Nevada Department of Employment, Training and Rehabilitation (DETR) 2018-2028**
1. Architecture (DETR SOC: 17-1011): Bachelor's Degree required. Total projected employment growth = 194 jobs. 17.01% growth.
2. Construction Management (DETR SOC: 11-9021): Bachelor's Degree required.  Total projected employment growth = 814 jobs. 22.5% growth
3. Software Design / Developers, Applications (DETER SOC: 15-1132): Bachelor's Degree Required.  Total projected growth = 1,462 jobs. 40% growth
4. Commercial & Industrial Design (DETR SOC: 27-1021): Bachelor's Degree required. Total projected growth = 52 jobs. 11.11% growth.
5. Graphic Designer (DETR SOC: 27-1024): Bachelor's Degree required. Total projected growth = 1,244 jobs. 15.89% growth.
6. Web Developers (DETR SOC: 15-1134): Associate's Degree required. Total projected growth = 334 jobs. 23.86% growth.

**The Nevada, U.S. Bureau of Statewide Occupational Employment Projections**
1. Architecture. The Nevada, U.S. Bureau Statewide Occupational Employment and Projections, 2018 – 2028.  (Site Occupational Projections - SOC prefix 17), projects a **21.1% growth.**

**Reciprocity.** With so few accredited B. Arch programs in the Western U.S. jurisdictions, TMCC's central location will provide an important role in servicing students in our neighboring states.  Most architects are licensed to practice in more than one jurisdiction, which can expand career opportunities for graduating students.  The flexibility and security of this can be

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accomplished through reciprocity, and agreement among the 55 U.S. jurisdictions – to recognize licenses issued by other boards.

## D.  Detailed curriculum proposal

### i.  Representative course of study by year (options, courses to be used with/without modification; new courses to be developed)

**First Year – Courses**

| 1ˢᵗ Semester Courses | Credits | Comments |
|---|---|---|
| ENG 101 Composition I | 3CR | Ex. course used without modification |
| AAD 101 Design w/ Nature | 3CR | Ex. course used without modification |
| AAD 180 Design Foundation Lecture | 3CR | Ex. course used without modification |
| AAD 181 Design Foundation Studio | 3CR | Ex. course used without modification |
| MATH 126 Pre-Calculus I | 3CR | Ex. course used without modification |
| **2ⁿᵈ Semester Courses** | | |
| AAD 125 Construction Drawing and Detailing | 3CR | Ex. course used without modification |
| AAD 223 Graphic Software for Ach & Const. | 3CR | Ex. course used without modification |
| AAD 280 Fundamentals of Arch. Design I | 3CR | Ex. course used without modification |
| CONS 120 Print Reading and Specification | 3CR | Ex. course used without modification |
| US & Nevada Constitutions | 3CR | Ex. course used without modification |

**Second Year – Courses**

| 3ʳᵈ Semester Courses | Credits | Comments |
|---|---|---|
| AAD 201 History of the Built Environment | 3CR | Ex. course used without modification |
| AAD 265 Computer Applications in Architecture I | 3CR | Ex. course used without modification |
| AAD 282 Fundamentals of Architecture Design II | 3CR | Ex. course used without modification |
| ENG 102 Composition II | 3CR | Ex. course used without modification |
| PHY 100 Introduction to Physics | 3CR | Ex. course used without modification |
| **4ᵗʰ Semester Courses** | | |
| AAD 230 Design with Nature | 3CR | Ex. course used without modification |
| AAD 2xx Topo Form & Design Technology | 3CR | New course to be developed |
| AAD 2XX Introduction to Land Planning | 3CR | Ex. course used re-activate |
| Elective – Fine Arts | 3CR | Ex. course used without modification |
| GEOL 100 Earthquakes, Volcanos & Nat. Disasters | 3CR | Ex. course used without modification |

**Third Year – Couse Subject Areas**

| 5ᵗʰ Semester Courses | Credits | Comments |
|---|---|---|
| AAD 3XX Revit Studio | 3CR | New course to be developed |
| AAD 3XX Structural Systems I | 3CR | New course to be developed |
| AAD 3XX Construction Materials | 3CR | New course to be developed |
| CONS 111 Building Codes | 3CR | Ex. course used without modification |
| AAD 3XX Environmental Control System I | 3CR | New course to be developed |
| **6ᵗʰ Semester Courses** | | |
| AAD 3XX Digital Studio | 3CR | New course to be developed |
| AAD 3XX Environmental Control System II | 3CR | New course to be developed |
| AAD 3XX Structural Systems II | 3CR | New course to be developed |
| CONS 121 Principles of Construction Estimating | 3CR | Ex. course used without modification |
| Elective | 3CR | Ex. course used without modification |

**Fourth Year – Couse Subject Areas**

| 7ᵗʰ Semester Courses | Credits | Comments |
|---|---|---|

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| AAD 4XX Integrated Design Studio I | 6CR | New course to be developed |
|---|---|---|
| AAD 4XX Stakeholders in Architecture | 3CR | New course to be developed |
| AAD 4XX Professional Practice | 3CR | New course to be developed |
| Elective | 3CR | Ex. course used without modification |
| **8th Semester Courses** | | |
| AAD 4XX Integrated Design Studio II | 6CR | New course to be developed |
| AAD 4XX Interior Design Studio | 3CR | New course to be developed |
| AAD 4XX Project Management | 3CR | New course to be developed |
| Elective | 3CR | Ex. course used without modification |

### Fifth Year – Couse Subject Areas

| 9th Semester Courses | Credits | Comments |
|---|---|---|
| AAD 4XX Integrated Design Studio III | 6CR | New course to be developed |
| AAD 4XX Theory and Urban Design | 3CR | New course to be developed |
| AAD 4XX Professional Practice II | 3CR | New course to be developed |
| Elective | 3CR | Ex. course used without modification |
| **10th Semester Courses** | | |
| GRC 4XX Portfolio Workshop | 3CR | Ex. course used without modification |
| AAD 4XX Thesis Studio | 12CR | New course to be developed |

ii. **Program entrance requirements**
Students may apply for admission to the Bachelor of Architecture program prior to completion of their AAS degree and may work on lower and upper division courses simultaneously, if needed to ensure timely completion of the program. It is recommended that students who which to do this, work the department to plan appropriate course sequence.

iii. **Program completion requirements (credit hours, grade point average; subject matter distribution, preprogram requirements)**
150 credit hours (60 lower and 90 upper)

iv. **Accreditation consideration (organization (if any) which accredits program, requirements for accreditation, plan for attaining accreditation - include costs and time frame)**
TMCC proposes to establish eligibility, candidacy and initial accreditation with the National Architectural Accrediting Board (NAAB). Graduation from a NAAB accredited degree program is a prerequisite of the Nevada State Board of Architects, Interior Design, and Residential Design (NSBAIDRD) to be eligible for professional licensure as an Architect. Additionally, graduation from a NAAB accredited degree program meets the same prerequisite for all state licensing boards within the United States. The degree program proposed herein would enable TMCC graduates to pursue licensure and professional careers throughout the U.S.
NAAB Accreditation Timeframe: The NAAB's system for accreditation of professional degree programs in higher education institutions requires self-assessment by the accredited-degree program, an evaluation of that assessment by the NAAB, and a decision regarding the term of accreditation by the NAAB Board of Directors. There are four (4) stages toward accreditation. Of immediate focus: Eligibility (Stage 1), Candidacy (Stage 2), and Initial Accreditation (Stage 3). Anticipated timeline:
• Eligibility: Spring 2023
• Candidacy: Spring 2025
• Initial Accreditation: Spring 2028
Costs. Costs/time will be absorbed in the daily activities by the lead faculty member.

v.  <u>For certificates only:</u> **Name of any state, national and/or industry recognized certification(s) or licensing examination(s) for which certificate prepares the student, if applicable**
      NA

**E. Method of Delivery (for the purpose of state authorization [NC-SARA])**

   i.  **How will this academic program be delivered when the program begins?**
      **(mark all that apply)**
         ☐ **100% face-to-face courses**
         ☒ **Hybrid (some online courses, some face-to-face courses)** Less than 5% will be offered online
         ☐ **100% online courses**

   ii. **Learning Placements**
      **Does the academic program have learning placements (e.g. internships, externships, clinical placements, student teaching, etc.) that *may take place outside the state of Nevada?***
         ☐ **Yes**
         ☒ **No.**

**F. Institutional Review Process**

   i.  **Date of Faculty Review (may include additional information, as needed)**
      The Dean or designee will conduct a classroom observation of each full-time tenured faculty member at least once every three (3) years. This will be done on a rotating basis so that one Article 12 Faculty Evaluation Process TMCC-NFA Contract 72 11/5/19 third of all the full-time tenured faculty members in the department will be observed each year.

      The Department Chair/APC/APD/Director will conduct a classroom observation and evaluation of all non-tenured, temporary faculty once a year. Zero Rank faculty will be evaluated every other year, or as deemed appropriate by the Dean.

      Fulltime faculty are also evaluated yearly, via Annual Performance Evaluations. The Annual Performance Evaluation is intended to give the faculty member and others reviewing the faculty member's performance a context for understanding the range and robustness of their professional activities in three areas of performance review – teaching effectiveness, professional development, and service to college and community.

   ii. **Describe the process for review and approval by the appropriate academic policy body of the institution**
      All proposals are reviewed by the Curriculum Review Committee (CRC) and ratified by the Faculty Senate following CRC approval.

**G. Readiness to begin program**

   i.  **List the educational and professional qualifications of the faculty relative to their individual teaching assignments**

   **#1 Fulltime Instructor of Architecture**

Currently in her fourth year of service at TMCC and in sixth year in the private sector. She holds a Bachelor in Architecture and Design from NSAD and a Master's Degree of Science in Sustainable Design from Philadelphia University.

- She is responsible for the architectural history classes.

### #2 Fulltime Instructor of Architecture

Currently in her third year of service at TMCC. She holds an Associate of Arts Degree (Cum Laude honors), Associate Applied Science in Residential Design and an Associate of Applied Science in Architecture (Cum Laude honors, Outstanding Architecture Student Recipient [2018] and TMCCs Career Champion [2021]).

- She is responsible for teaching architectural courses to ACE Charter High School students

### #1 Part-time Professor of Architecture

Currently is the lead faculty for Architecture, Residential Design and Landscape Architecture degree emphases. He is a fulltime tenured faculty member on his eleventh year of service and on his thirty-fourth-year practicing in the private sector. He holds a Bachelor in Landscape Architecture and a Masters Degree in Educational Leadership from University of Nevada Reno. He currently holds the following state recognized licenses:

- Residential Designer 373NV
- Landscape Architect 384NV & 4807CA
- He is responsible for the first- and second-year design classes along with architectural history classes.

### #2 Part-time Instructor of Architecture

He is a part-time faculty member this is currently on his eight year of service.
He holds a Bachelor of Architecture from the University of Southern California.

- Architecture License: 6856NV
- Responsible for the second-year design classes

### #3 Part-time Instructor of Architecture

He is a part-time faculty member this is currently on his third year of service.
He holds a Bachelor of Philosophy degree from California State University-Chico, a Professional degree in Art & Architecture from the University of Idaho, and Summer Seminar certificates from the Harvard University Graduate School of Design focused on College Student Centers and Campus Residential Communities.

- Architecture License: 3110NV & 19555CA (pending renewal)
- He is responsible for the construction drawing and detailing classes

### #4 Part-time Instructor of Architecture

He is a part-time faculty member currently on his third year of service. He holds a Bachelor of Architecture from New School of Architecture. National Strategic Councilor – American Institute of Architects. Senior Director – American Institute of Architects , Western Mountain Region. President of the American Institute of Architects Northern Nevada. Principal of FormGrey Studio.

- Responsible for curriculum development
- Slated Part-time instructor for upper division courses

### #5 Part-time Instructor of Architecture

Currently responsible for curriculum development for the structural engineering courses. She holds Professional Engineering Licenses in NV, AZ, CO, & CA. Holds a Bachelor of Science in Civil Engineering with an emphasis in structural engineering from the University

of Colorado at Boulder and a Masters Degree in Education and Outreach from the University of Nevada, Reno.
- Responsible for curriculum development
- Slated Part-time instructor for structural engineering courses

### #6 Part-time Instructor of Architecture
Currently responsible for curriculum development for upper division architectural courses and on her tenth year as an Architectural Design Juror. She holds a Bachelor Degree from the University of Nevada, Reno and a Masters Degree in Architecture from Arizona State University.  Nevada Licensed Architect.
- Responsible for curriculum development
- Slated Part-time instructor for upper division courses

### #7 Part-time Instructor of Architecture
Currently a student of architecture at Idaho State.  Formally a part-time instructor at TMCC for three years.
- Slated for online "virtual" studio environments

 

ii.  **List the anticipated sources or plans to secure qualified faculty and staff**
Current college faculty are qualified; however, due to teaching loads the need to hire one full-time instructor is planned.

iii.  **Contribution of new program to department's existing programs (both graduate and undergraduate) and contribution to existing programs throughout the college or university**
This program will continue the pathway for former, current and future students of TMCC Associate Degree programs.

iv.  **Recommendations from prior program review and/or accreditation review teams**
   a.  Architecture Advisory Committee (minutes attached – May 08, 2020) located after the summary statement.
   b.  Nevada State Board of Architecture, Interior Design and Residential Design – located after the summary statement.

## H.  Resource Analysis

i.  **Proposed source of funds (enrollment-generated state funds, reallocation of existing funds, grants, other state funds)**
The BArch degree will be funded by state funds.  Many of the associate degrees in Allied Health and Technical Sciences count between 2 to 4 weighted student credit hours per student.  At this time, there is no plan to implement differential or special fees.

ii.  **Each new program approved must be reviewed for adequate full-time equivalent (FTE) to support the program in the fifth year.  Indicate if enrollments represent 1) students formally admitted to the program, 2) declared majors in the program, or 3) course enrollments in the program.**

   a.  **(1) Full-time equivalent (FTE) enrollment in the Fall semester of the first, third, and fifth year.**

   **1st Fall semester** <u>6</u>

<div align="center">25</div>

**3rd Fall semester** 7.8

**5th Fall semester** 9.6

**(2) Explain the methodology/assumptions used in determining projected FTE figures.**
As the majority of students in the Architecture discipline are part-time, an average of 9 credits/semester were used in the FTE calculation: Estimated headcount*9/15.

b. **(1) Unduplicated headcount in the Fall semester of the first, third, and fifth year.**

**1st Fall semester** 10

**3rd Fall semester** 13

**5th Fall semester** 16

**(2) Explain the methodology/assumptions used in determining projected headcount figures.**
A polling of existing students indicates we can expect 5-7 students from the existing AAS degree to transition into the BArch in Year 1, and we anticipate marketing will bring an additional 4-5 new students. As the program progresses, we anticipate seeing more students who start the BArch in year 1, as opposed to transferring from the AAS program. This program will be marketed to past AAS Architecture students as a continuing education opportunity; and TMCC is establishing an Architecture cohort with ACE High School which will have about 10 graduating students each year and will be feeder for the program.

Projections are based on estimated enrollment depicted below. 12-15 students are anticipated to graduate annually. Assumptions include enrollment drops for each year.

| Headcount projections | First fall | Second Fall | Third fall | Fourth Fall | Fifth Fall |
|---|---|---|---|---|---|
| | 2022 | 2023 | 2024 | 2025 | 2026 |
| New students (300 level) | 10 | 11 | 13 | 15 | 16 |
| Second Year (400 level) | 0 | 8 | 9 | 11 | 13 |
| Third year (500 level) | 0 | | 7 | 8 | 10 |
| Total in Program | 10 | 19 | 29 | 34 | 39 |

iii. **Budget Projections – Complete and attach the Five-Year Program Cost Estimate and Resource Requirements Table.**
The Five-Year Program Cost Estimate is completed and attached.

I. **Facilities and equipment required**

i. **Existing facilities: type of space required, number of assignable square feet, space utilization assumptions, special requirements, modifications, effect on present programs**

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Students pursuing the proposed certificate of achievement will primarily utilize the following existing classrooms found on the Pennington Applied Technology Center: 113 Computer Lab (800sf), 264 Studio/Classroom (1,525sf), 265 Classroom (820sf), and 267 Supply Rm. (200sf).

ii. **Additional facilities required: number of assignable square feet, description of space required, special requirements, time sequence assumed for securing required space**
One to two additional class rooms are being proposed. It is intended to use existing classrooms on site and to coordinate reservations campus wide at each Fall and Spring semesters.

iii. **Existing and additional equipment required**
A 24 inch x 36 inch $CO_2$ Laser Cutter is anticipated. Venting and power drops are existing.

J. **Describe the adequacy and availability of library and information resources**
The library resources are available as database and printed resources as accessible through TMCC Library at the Dandini (main) Campus and the Learning Resource Center at the William Pennington Applied Technology Campus (location of the proposed BArch)

K. **Student services**

i. **Describe the capacity of student support services to accommodate the program. Include a description of admissions, financial aid, advising, library, tutoring, and others specific to the program proposal**
The program will use existing student support services. In addition, TMCC's Curriculum Review Committee included representatives from Advising, Financial Aid, and the Learning Resource Center are aware of the program proposal and voted for its approval.

ii. **Describe the implications of the program for services to the rest of the student body**
Each department where CTE occurs will need to add program advising information to the recruitment packets as well as provide information on individual program websites and the TMCC catalog.

Even with this effort TMCC Advising will be at the front-line of advising for the BArch degree. There will be less impact in some ways for Financial Aid as students will have already earned an associate Degree and the number of appeals for excess credit fees will be fewer. However, there will be additional impact for Financial Aid due to the number of students who will be using Financial Aid services for this degree.

This degree will impact Student Services in some ways and less in others since the students will have the required Gateway Math and English. As higher-level math is required there will be an impact on tutoring and that will affect other members of the student body if there are more students needing tutoring services. Admissions and the Cashiers Office will see more traffic from students in the BArch program.

**Consultant Reports – If a consultant was hired to assist in the development of the program, please complete subsections A through C. A copy of the consultant's final report must be on record at the requesting institution.**

iii. **Names, qualifications and affiliations of consultant(s) used**
NA

iv. **Consultant's summary comments and recommendations**
NA

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    **v. Summary of proposer's response to consultants**
    NA

**L. Articulation Agreements**

    **i. Articulation agreements were successfully completed with the following NSHE institutions. (Attach copies of agreements)**
    See below.

    **ii. Articulation agreements have not yet been established with the following NSHE institutions. (Indicate status)**
    Articulation agreements are being pursued with WNC and GBC as well as UNLV's Master's program. An agreement with CSN will be pursued on an individual student basis should the need arise.

    **iii. Articulation agreements are not applicable for the following institutions. (Indicate reasons)**
    UNR and NSC do not have associate degrees or master's level programs in Architecture.

**M. Summary Statement**

This five (5) year BArch degree builds upon an existing Associate of Applied Science in Architecture (60 credits), a stackable Architectural Drafting Skills Certificate (31 credits) and two (2) skills certificates totaling twenty-one credits. The proposed B.Arch. will build upon the existing frame work by adding 90 additional credits for a total of 150 credits.

The B.Arch. combines the knowledge and depth of both STEM and CTE fields of study.

Master of Architecture degree graduates are in steady decline. OWINN's typical entry-level education analysis reports that only 8% of the workforce ready students require a master's degree.

TMCC's BArch proposal will strengthen and broaden the:
- Continual awareness of closing the achievement gap among underserved populations.
- Access to multiple learning modalities, wide-ranging class schedules, and partnering with local industry on curriculum development and internship opportunities.
- Ability to spend time and money wisely and efficiently. TMCC's BArch represents the most efficient path towards Nevada's educational licensure requirements.
- Opportunities for internship and job shadowing, as required by the NV architectural regulatory board.
- Life-long learning opportunities by accessing Skills Certificates, Certificates of Achievements, and non-credit workforce development classes that respond to employer training needs.
- Dual enrollment opportunities for high school students.

Graduating BArch students will be prepared to develop and shape a program that is informed by industry and leverages Nevada's research institutions to address issues such as climate change, wildfire safety, drought cycles, and water quality. Graduating students will be prepared to solve climate change issues such as meeting the 2050 Climate Action Plan with the goal of a world with net-zero greenhouse gas emissions.

Graduating BArch students will be prepared to create housing/community opportunities that will provide equal access to resources for people who might otherwise be excluded or marginalized, such as those who have physical or mental disabilities and members of minority groups.

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Underserved Populations.  Many of our students represent underserved populations, and have expressed financial distress over the lack of "reasonably" close transfer institutions.  Costly relocation costs, often accompanied with the need to find new revenue streams, will frequently end career paths.

**It is about time.** Prior to moving forward, opinions were sought from TMCC's Architectural Advisory Board, The Northern Nevada Chapter of American Institute of Architects, and students currently enrolled in the architectural program.  A resounding theme of "It is about time" was shared by all.

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### G.iv.   Recommendations from prior program review and/or accreditation review teams

TMCC Architectural Advisory Board Meeting Minutes – Spring 2020

**Discussion:** Jeff F- There's a long way to go in a short amount of time. Feasibility Study-numbers are too low, pool needs to reach out to Bay Area.  Timing is important and needs a well-placed document.

**Discussion**: Barb W. -Covid 19 has ruined everything. There may be a delay because of resources, hiring freezes, budget reductions. If things go back to normal, then submit. If not hold on to it.

Bachelor of Architecture Feasibility Study.  Discussion: Kreg M.- **Consensus from Advisory Board: Unanimous approval – move forward on the BArch.**

**Discussion:** Kevin K.-This program can attract California students. This will be favorable because of lower tuition; it will be more affordable out of state than in-state. It's a great recruiting tool, cheaper in Nevada than in northern California.

**Discussion:** Laptop Update-20 laptops are available to Architecture and Landscape Architectural students.

**Discussion:** Laser Cutter Update-The Laser cutter was on the Perkins list but didn't make cut. Laser Cutter from machining will be used for now.

### G.iv.
   b.  Nevada State Board of Architecture, Interior Design and Residential Design (see next page).

Program Resource Requirements. Indicate all resources needed including the planned FTE enrollment, projected revenues, and estimated expenditures for the first, third and fifth fiscal years of the program. Include reallocation of existing personnel and resources and anticipated or requested new resources. Third and fifth year estimates should be in dollars adjusted for inflation. If the program is contract related, explain the fiscal sources and the year-to-year commitment from the contracting agency(ies) or party(ies). Note: This form reflects the NWCCU's Substantive Change Budget Worksheet as of 8/28/17.

**College/University: ___Truckee Meadows Community College_____**     **Program: __Bachelor of Architecture_____**

## I. PLANNED STUDENT ENROLLMENT

*Note : Enrollment numbers (A + B) for each fiscal year should match the FTE/Headcount numbers in the Academic Program Proposal Form (Sect. I.ii.).*

| | FY 1: FY 2023 | | FY 3: FY 2025 | | FY 5: FY 2027 | |
|---|---|---|---|---|---|---|
| | FTE | Headcount | FTE | Headcount | FTE | Headcount |
| A.  New enrollments to the Institution | 2.4 | 4 | 5.4 | 9 | 9.6 | 16 |
| B.  Enrollments from Existing Programs | 3.6 | 6 | 2.4 | 4 | | 0 |

## II. REVENUE

| | FY 1: FY 2023 | | FY 3: FY 2025 | | FY 5: FY 2027 | |
|---|---|---|---|---|---|---|
| | On-going | One-time | On-going | One-time | On-going | One-time |
| 1. New Appropriated Funding Request | | | | | | |
| 2. Institution Funds | $62,345 | $18,900 | $148,876 | $32,000 | $133,964 | $28,500 |
| 3. Federal (e.g. grant, appropriation) | | | | | | |
| 4. New Tuition Revenues (registaration fee) from Increased Enrollments* | $47,870 | | $63,814 | | $78,540 | |
| 5. Other Student Fees (associated with the program)* | $2,800 | | $3,640 | | $4,480 | |
| 6. Other (i.e., Gifts) | | | | | | |
| **Total Revenue** | $113,015 | $18,900 | $216,330 | $32,000 | $216,984 | $28,500 |

*Note : Total Revenue (Section I) should match Total Expenditures (Section III)*

*Revised November 2018*

# NSHE Academic Program Proposal - Five-Year Program Cost Estimate and Resource Requirements

Enter N/A if the information is not applicable to the program proposal

## III. EXPENDITURES

| | FY 1: FY 2023 | | FY 3: FY 2025 | | FY 5: FY 2027 | |
|---|---|---|---|---|---|---|
| | On-going | One-time | On-going | One-time | On-going | One-time |
| **A. Personnel Costs** | | | | | | |
| 1. FTE (**Total FTE for all personnel types**) | 1.1 | 1 | 2.1 | 0 | 2.1 | 0 |
| Faculty | 1 | | | | | |
| Adjunct Faculty | 0 | 1 | 2 | | 2 | |
| Grad Assts | | | | | | |
| Research Personnel | | | | | | |
| Directors/Administrators | | | | | | |
| Administrative Support Personnel | 0.1 | | 0.1 | | 0.1 | |
| Other: _____ | | | | | | |
| *Expenditures for personnel type below must reflect FTE levels in Section A.1.* | | | | | | |
| 2. Faculty | $102,315 | | $204,630 | | $204,630 | |
| 3. Adjunct Faculty | | $13,900 | | | | |
| 4. Graduate Assistants | | | | | | |
| 5. Research Personnel | | | | | | |
| 6. Directors/Administrators | | | | | | |
| 7. Administrative Support Personnel | $7,700 | | $7,700 | | $7,854 | |
| 8. Fringe Benefits | | | | | | |
| 9. Other: | | | | | | |
| ***Total Personnel Costs*** | $110,015 | $13,900 | $212,330 | $0 | $212,484 | $0 |

# NSHE Academic Program Proposal - Five-Year Program Cost Estimate and Resource Requirements

Enter N/A if the information is not applicable to the program proposal

|  | FY 1: FY 2023 | | FY 3: FY 2025 | | FY 5: FY 2027 | |
|---|---|---|---|---|---|---|
|  | On-going | One-time | On-going | One-time | On-going | One-time |
| **B. Operating Expenditures** |  |  |  |  |  |  |
| 1. Travel - NAAB (Accrediting Board) |  | $5,000 |  | $5,000 |  | $5,000 |
| 2. Professional Services |  |  |  | $2,000 |  | $3,500 |
| 3. Other Services |  |  |  |  |  |  |
| 4. Communications |  |  |  |  |  |  |
| 5. Materials and Supplies | $2,500 |  | $3,500 |  | $4,000 |  |
| 6. Rentals |  |  |  |  |  |  |
| 7. Marketing materials and Advertising | $500 |  | $500 |  | $500 |  |
| 8. Miscellaneous - Laser Cutter & Wood Shop |  |  |  | $25,000 |  | $20,000 |
| **Total Operating Expenditures** | $3,000 | $5,000 | $4,000 | $32,000 | $4,500 | $28,500 |

|  | FY 1: FY 2023 | | FY 3: FY 2025 | | FY 5: FY 2027 | |
|---|---|---|---|---|---|---|
|  | On-going | One-time | On-going | One-time | On-going | One-time |
| **C. Capital Outlay** |  |  |  |  |  |  |
| 1. Library Resources |  |  |  |  |  |  |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2. Equipment | | | | | | |
| **Total Capital Outlay** | $0 | $0 | $0 | $0 | $0 | $0 |
| **TOTAL EXPENDITURES (IIIA + IIIB + IIIC):** | $113,015 | $18,900 | $216,330 | $32,000 | $216,984 | $28,500 |
| *Note : Total Expenditures (Section IIIA-C total) should match Total Revenue (Section I)* | | | | | | |

**Budget Notes (optional):**

This is a new credential that expands on the existing AAS Architecture degree. Salaries reflect faculty and support staff already teaching in the existing AAS program. The 100 and 200 level courses within the B-ARCH program have existing State funding, but is shown in the estimated budget. We anticipate that Year 1 launch of the 300 level courses will be covered by a part-time instructor and a new Instructor line will be needed for cover muliple class levels.

Consumables will be covered by the lab fees and existing operational budget. Anticipated need to increase operational as program grows. No additional equipment is needed, but could be procured if grant resources available.

Supporting staff serves 10 programs, so estimated at 0.1 FTE.; Personnel salaries already include fringe; Do not anticipate COLA for year 3 but anticipate it for year 5.; LOA rate at $850 per unit years 1; fringe rate at 9.5%

Professional services includes accrediation review fee and hosting accrediation visits (after first graduating cohort) and review. After accreditation, this is a reoccuring cost only every 8 years.

# Transfer Agreement

**Associate Degree Program:**            **Bachelor's Degree Program:**
**Associate of Arts Transfer**             **Bachelor of Architecture**

*NOTE: This transfer agreement has been created specifically for the programs listed above and only applies to students that complete the associate degree listed. If the associate degree is not earned, or a new program is selected, the transfer and articulation of listed courses, as well as fulfilled degree requirements, could be impacted.*

**Specific General Education Courses Required: AAD 223 or 265 will satisfy GBC's Technological Proficiency Requirement; ENG 102; MATH 126; Humanities/Diversity: AAD 201 (also taken at TMCC); Science: Any GEOL and any PHYS course.** These courses should be completed during the associate program. NOTE: Lower-division General Education requirements are fulfilled upon completion of the associate degree, with the exception of the courses listed above.  If a General Education subject is not listed here, you may select any general education course approved for the associate degree program.

**Specific Program Courses Required (electives for the AA): AAD 101, 201, 223, 230, 261, 262, 265, 280, 282, 299, & CONS 120**

These courses will articulate to specific program requirements for the bachelor's program. Courses marked with an asterisk (*) are critical prerequisite or bachelor's program progression courses which will impact a student's progress to completing the bachelor's degree in a timely manner if they are not taken during the associate degree program.

**Courses that must be taken at TMCC: AAD 101, 201, 223, 230, 261, 262, 265, 280, & 282. These courses will be offered online for students entering the transfer agreement.**

These courses must be taken at TMCC and may be used for reverse transfer towards the Associate of Arts degree. The courses are marked with a double asterisk (**). These courses will be offered online for students entering the transfer agreement.

**Articulations/Block Transfer: AAD 223 or 265 will satisfy GBC's Technological Proficiency Requirement**

These courses are approved articulations/substitutions/block transfer for the above mentioned programs and will transfer accordingly and apply to the bachelor's program as listed.

TMCC Academic Advisement          GBC Admission, Advising & Career Center
775-673-7062                 775-753-2180
RDMT 111, Dandini Campus               Berg Hall, Elko
tmcc.edu/advisement/                    gbcnv.edu/career/

# Year-to-Year Course Outline

| Associate of Arts | Prerequisites | Bachelor of Architecture | Prerequisites |
|---|---|---|---|
| **Semester 1 (15 units)** | | **Semester 5 (15 units)** | |
| ENG 101 – Composition I (3 units) | | ARCH 350 – Digital Studio I (3 units) | AAD 180, 181. Application required. |
| MATH 126 – Pre-Calculus I (3 units) | | ARCH 360 – Structural System I (3 units) | |
| Science: Any GEOL course* (Recommend GEOL 100) (3 units) | | ARCH 325 -- Construction Materials (3 units) | |
| Fine Arts (3 units) | | ARCH 341 – Environmental Control System I (3 units) | |
| COM 113 (3 units) | | CONS 111 – Building Codes (3 units) | |
| **Semester 2 (15 units)** | | **Semester 6 (15 units)** | |
| Social Science (3 units) | | ARCH 351 – Digital Studio II (3 units) | ARCH 350 |
| US and NV Constitutions (3 units) | | ARCH 342 – Environmental Control System II (3 units) | |
| ENG 102 – Composition II (3 units) | | ARCH 361 – Structural System II (3 units) | ARCH 360, PHYS 100, MATH 126; or approval |
| AAD 101– Design with Nature (3 units)** | | CONS 121 – Principles of Construction Estimating (3 units) | |
| CONS 120 – Print Reading and Specification (3 units)** | | Elective (3 units) | |
| **Summer Session (9 units)** | | **Semester 7 (15 units)** | |
| AAD 299* - Architectural Design Transition Camp (9 units) Replaces AAD 180, 181 & 125 | | ARCH 452 Integrated Design Studio I (6 units) | |
| **Semester 3 (15 units)** | | ARCH 412 – Stakeholders in Architecture (3 credits) | |
| AAD 223** – Graphic Software for Arch, Const, Dsgnr, Planners (3 units)** (Satisfies GBC's Technological Proficiency Requirement) | AAD 299 prereq. AAD 280 coreq. | ARCH 422 – Professional Practice I (3 credits) | |
| AAD 280** – Fundamentals of Architecture Design I (3 units)** | AAD 299 prereq; AAD 223 coreq. | Elective (3 credits) | |
| Humanities/Diversity: AAD 201 – History of the Built Environment (3 units)** | | **Semester 8 (15 units)** | |
| AAD 265 – Computer Applications in Architecture (3 units)** (Satisfies GBC's Technological Proficiency Requirement) | AAD 282 coreq. | ARCH 453 – Integrated Design Studio II (6 units) | |
| AAD 282 – Fundamentals of Architecture Design II (3 units)** | AAD 265 coreq. | ARCH 461 – Theory and Urban Design I (3 units) | |
| **Semester 4 (15 units)** | | ARCH 426 – Project Management (3 units) | |
| Science: Any PHYS course* (Recommend PHYS 100) (3 units) | | Elective (3 units) | |
| Humanities/Structure of Societies (3 units) | | **Semester 9 (15 units)** | |
| AAD 230 – Design with Climate (3 units)** | Instructor permission | ARCH 455 – Integrated Design Studio III (6 units) | |
| AAD 262 – Topo Form and Design Technology (3 units)** | Instructor permission | ARCH 462 -- Theory and Urban Design II (3 units) | |
| AAD 261 – Introduction to Land Planning (3 units)** | Instructor permission | ARCH 423 – Professional Practice II (3 units) | |
| | | Electives (3 units) | |
| | | **Semester 10 (15 units)** | |
| | | ARCH 475 – Portfolio Workshop (3 units) | |
| | | ARCH 480 – Thesis Studio I (6 units) | |
| | | ARCH 485 - Thesis Studio (6 units) | |

# Transfer Agreement

**WESTERN NEVADA COLLEGE**

**TMCC**
Truckee Meadows
Community College

**Associate Degree Program:**
**Associate of Arts Transfer**

**Bachelor's Degree Program:**
**Bachelor of Architecture**

*NOTE: This transfer agreement has been created specifically for the programs listed above and only applies to students that complete the associate degree listed. If the associate degree is not earned, or a new program is selected, the transfer and articulation of listed courses, as well as fulfilled degree requirements, could be impacted.*

**Specific General Education Courses Required: ENG 102; MATH 126; Humanities/Diversity: AAD 201 (also taken at TMCC); Science: Any GEOL and any PHYS course.** These courses should be completed during the associate program. NOTE: Lower-division General Education requirements are fulfilled upon completion of the associate degree, with the exception of the courses listed above.  If a General Education subject is not listed here, you may select any general education course approved for the associate degree program.

**Specific Program Courses Required (electives for the AA): AAD 101, 201, 223, 230, 261, 262, 265, 280, 282, 299; CONS 120**

These courses will articulate to specific program requirements for the bachelor's program. Courses marked with an asterisk (*) are critical prerequisite or bachelor's program progression courses which will impact a student's progress to completing the bachelor's degree in a timely manner if they are not taken during the associate degree program.

**Courses that must be taken at TMCC: AAD 101, 201, 223, 230, 261, 262, 265, 280, & 282. These courses will be offered online for students entering the transfer agreement.**

These courses must be taken at TMCC and may be used for reverse transfer towards the Associate of Arts degree. The courses are marked with a double asterisk (**). These courses will be offered online for students entering the transfer agreement.

**Articulations/Block Transfer: N/A**

These courses are approved articulations/substitutions/block transfer for the above mentioned programs and will transfer accordingly and apply to the bachelor's program as listed.

TMCC Academic Advisement                                                         WNC Counseling Services
775-673-7062                                                                          775-445-3267
RDMT 111, Dandini Campus                           Carson City Campus, Bristlecone Building, Room 103
tmcc.edu/advisement/                                                                counseling@wnc.edu

# Year-to-Year Course Outline

| Associate of Arts | Prerequisites | Bachelor of Architecture | Prerequisites |
|---|---|---|---|
| **Semester 1 (15 units)** | | **Semester 5 (15 units)** | |
| ENG 101 – Composition I (3 units) | | ARCH 350 – Digital Studio I (3 units) | AAD 180, 181. Application required. |
| MATH 126 – Pre-Calculus I (3 units)* | | ARCH 360 – Structural System I (3 units) | |
| Science: Any GEOL course* (Recommend GEOL 100) (3 units) | | ARCH 325 -- Construction Materials (3 units) | |
| Fine Arts (3 units) | | ARCH 341 – Environmental Control System I (3 units) | |
| US/NV Constitution (3 units) | | CONS 111 – Building Codes (3 units) | |
| **Semester 2 (15 units)** | | **Semester 6 (15 units)** | |
| ENG 102 – Composition II (3 units) | | ARCH 351 – Digital Studio II (3 units) | ARCH 350 |
| Social Science (3 units) | | ARCH 342 – Environmental Control System II (3 units) | |
| CONS 120 – Print Reading and Specification (3 units)* | | ARCH 361 – Structural System II (3 units) | ARCH 360, PHYS 100, MATH 126; or approval |
| AAD 101 – Design with Nature (3 units)** | | CONS 121 – Principles of Construction Estimating (3 units) | |
| Physics (PHYS 100 recommended) (3 units)* | | Elective (3 units) | |
| **Summer Session (9 units)** | | **Semester 7 (15 units)** | |
| AAD 299 - Architectural Design Transition Camp (9 units)** Replaces AAD 180, 181 & 125 | | ARCH 452 Integrated Design Studio I (6 units) | |
| **Semester 3 (12 units)** | | ARCH 412 – Stakeholders in Architecture (3 units) | |
| AAD 223 – Graphic Software for Arch, Const, Dsgnr, Planners (3 units)** | AAD 299 prereq. AAD 280 coreq. | ARCH 422 – Professional Practice I (3 units) | |
| AAD 280 – Fundamentals of Architecture Design I (3 units)** | AAD 299 prereq.; AAD 223 coreq. | Elective (3 credits) | |
| | | **Semester 8 (15 units)** | |
| AAD 265 – Computer Applications in Architecture (3 units)** | AAD 299 prereq; AAD 282 coreq. | ARCH 453 – Integrated Design Studio II (6 units) | |
| AAD 282 – Fundamentals of Architecture Design II (3 units)** | AAD 299 prereq; AAD 265 coreq. | ARCH 461 – Theory and Urban Design I (3 units) | |
| **Semester 4 (12 units)** | | ARCH 426 – Project Management (3 units) | |
| Humanities/Diversity: AAD 201 – History of the Built Environment (3 units)** | | Elective (3 units) | |
| AAD 230 – Design with Climate (3 units)** | Instructor permission | **Semester 9 (15 units)** | |
| AAD 262 – Topo Form and Design Technology (3 units)** | Instructor permission | ARCH 455 – Integrated Design Studio III (6 units) | |
| AAD 261 – Introduction to Land Planning (3 units)** | Instructor permission | ARCH 462 -- Theory and Urban Design II (3 units) | |
| | | ARCH 423 – Professional Practice II (3 units) | |
| | | Electives (3 units) | |
| | | **Semester 10 (15 units)** | |
| | | ARCH 475 – Portfolio Workshop (3 units) | |
| | | ARCH 480 – Thesis Studio I (6 units) | |
| | | ARCH 485 - Thesis Studio (6 units) | |

# NEVADA STATE BOARD

of Architecture, Interior Design and Residential Design

**MAIN OFFICE**

2080 E Flamingo Rd, Suite 120
Las Vegas, Nevada 89119

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Fax: (702) 486-7304

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June 15, 2021

Kreg Mebust, TMCC Professor of Architecture, Landscape Architecture and Residential Design
William Pennington Applied Technology Center
475 Edison Way
EDSN 207B
Reno, NV 89502

Re: Letter in Support of the proposal for an accredited Bachelor of Architecture at TMCC

Dear Professor Mebust,

Thank you for your presentation regarding the proposal for an accredited Bachelor of Architecture (B. Arch.) at Truckee Meadows Community College (TMCC). Please apprise the Nevada System of Higher Education Board of Regents that the Nevada State Board of Architecture, Interior Design and Residential Design is in full support of TMCCs proposed five-year Bachelor of Architecture with the following findings:

- **Career and Technical Education.** Supports the Governor's Office of Economic Development by strengthening Career and Technical Educational and STEM pathways in Nevada.
- **Licensure.** NSBAIDRD finds the value and need for two NAAB-accredited architecture programs within Nevada.
- **Curriculum.** TMCCs B. Arch. curriculum proposes high value areas of study that are currently not in place.
- **Access.** Encourages access to Nevada's underserved populations that is expedient and affordable.
- **Student Choice.** Creates a new opportunity for student choice, towards the proposed accredited B. Arch. or an existing Master of Architecture within Nevada.
- **Protection of the Public Health, Safety, and Welfare.** Having an accredited program of architecture at TMCC will further enhance the protection of the public health, safety and welfare. Graduates of the TMCC proposed architectural program will have the opportunity to obtain licensure upon graduation by the architecture program's proposed participation in the NCARB Integrated Path to Architectural Licensure (IPAL) option.

Every day, almost every citizen, young and old, throughout the State of Nevada is served and protected in buildings in which they reside, work, receive their education and or health care, or participate in the state's commerce, which have been designed by Nevada architects.

By supporting the Bachelor of Architecture Proposal with the end goal being obtaining NAAB-accreditation, we see the value in our community partnership with TMCC and look forward to shaping the student learning environment for years to come.

Thank you for your thoughtful considerations. Should you have any questions, please feel free to reach out.

Sincerely,

James Mickey
Chairman

NEVADA STATE BOARD OF ARCHITECTURE
INTERIOR DESIGN AND RESIDENTIAL DESIGN

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**one truckee river**

(775) 450-5489 - P.O. Box 18153 Reno, NV 89521 - www.onetruckeeriver.org

May 4, 2021

To: Kreg Mebust, Truckee Meadows Community College Professor of Architecture, Landscape Architecture and Residential Design
William Pennington Applied Technology Center
475 Edison Way
EDSN 207B
Reno, NV 89502

Dear Mr. Mebust,

Thank you for our zoom meeting regarding the proposal for an accredited Bachelor of Architecture at Truckee Meadows Community College (TMCC). One Truckee River's (OTR) mission works to ensure a healthy, thriving, sustainable river connected to the hearts and minds of its community. After our conversations and sharing these details with the OTR Board of Directors, we see the opportunity for a strong partnership with TMCC's architecture program that could support OTR's major goals:

- Goal #1: Promote and protect water quality and ecosystem health in the Truckee River.
- Goal #2: Create and sustain a safe, beautiful and accessible river connecting people and places.
- Goal #3: Build an aware and engaged community that protects and cares for the river.
- Goal #4: Ensure the sustainable and collaborative management of the river for today and into the future.

Specifically, OTR could envision a TMCC's architecture program engagement with the following OTR's Action Items:

- **Action Item 1.4.c)** *Develop and implement a coordinated vegetation management plan along the river.* *Currently, two OTR efforts are underway, related to 1.4.c.: 1) a coordinated vegetation management planning process with multiple agencies along the river and 2) a River Friendly Landscaping adult educational pilot.
- **Action Item 2.1.e)** *Enhance Truckee River visitor safety, access, public facilities (bathrooms) and education.* * Currently, there are multiple actions under way related to 2.1.e lead by OTR partners.

By supporting the Bachelor of Architecture Proposal, we see the value in our community partnership with TMCC and look forward to shaping the student learning environment for years to come and supporting a thriving environment along the Truckee River. Thank you for your thoughtful considerations. Should you have any questions, please feel free to reach out.

Sincerely,

Iris Jehle-Peppard, Executive Director of One Truckee River

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**TMRPA**
TRUCKEE MEADOWS REGIONAL PLANNING AGENCY

June 4, 2021

Kreg Mebust, TMCC Professor of Architecture
Truckee Meadows Community College – Applied Technology Center
475 Edison Way
EDSN 207B
Reno, NV 89502

Dear Kreg,

As it pertains to TMCCs Bachelor of Architecture proposal and the community partnership with the Truckee Meadows Regional Planning Agency, we acknowledge the importance of educating our local workforce.  In particular, as emerging trend lines include land-use facilitation, infrastructure and resource management conversations among public and private decision makers.

By supporting the Bachelor of Architecture Proposal, we see the value in our community partnership with TMCC and look forward to shaping the student learning environment for years to come.

Respectfully,

*Jeremy Smith*

**Jeremy Smith**
**Director**
Truckee Meadows Regional Planning Agency
1105 Terminal Way, Suite 316
Reno, NV 89502
775.321.8393
JSmith@tmrpa.org

April 23, 2021

To Whom It May Concern:

I have been in contact with Professor Mebust regarding the proposal for an accredited Bachelor of Architecture at Truckee Meadows Community College. As a founding member of Reno's Black Rock Design Institute, a nonprofit organization that fosters public interest, professional education, and community outreach, I have found significance and relevancy to the Bachelor of Architecture proposal. Having practiced architecture in Nevada for over 30 years, I believe it is in the best interest of the architectural community to expand architectural education programs.

By supporting the Bachelor of Architecture proposal, I see the value in our community partnership with TMCC and look forward to shaping the student learning environment for years to come.

Thank you for your thoughtful considerations. Should you have any questions, please feel free to reach out.

Sincerely,

Jack L. Hawkins, AIA
Principal

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April 16, 2021

To:     Kreg Mebust, ACUE, ASLA, RLA #384, LEED AP, RD #373
        TMCC Professor of Architecture, Landscape Arch & Residential Design
        William Pennington Applied Technology Center, EDSN 207B
        475 Edison Way
        Reno NV 89502

From:   Jana Vanderhaar, RLA #856
        Chair, Nevada Chapter of the American Society of Landscape Architecture (NVASLA), N. Section
        870 Daniel Drive
        Reno NV 89509

**RE:  Support for Landscape Architecture Track as part of Bachelors of Architecture at TMCC**

Dear Kreg,

Thank you for answering our questions regarding the proposal for an accredited Bachelor of Architecture at Truckee Meadows Community College (TMCC) with a track emphasizing Landscape Architecture at our Nevada Chapter American Society of Landscape Architects (NVASLA) executive board meeting.  As you know, landscape architects lead the planning, design, and stewardship of healthy, equitable, safe, and resilient environments.  The Society's mission is to advance landscape architecture through advocacy, communication, education, and fellowship.

NVASLA prides itself in providing continuous education of its members and the public through events, tours, presentations by fellow professionals, and project awards.  We thereby foster stewardship of the environment with equity and inclusion.  Increasing the interaction of people with the site to promote health, safety and welfare is at heart of our profession.

We support the proposed TMCC Bachelor of Architecture, with its Landscape Architecture track.  The benefit of offering students additional elective courses that provide them tools to create better design of places outside the building for people to enjoy a relationship with the land is paramount.  In short, we see the value of our community partnership with TMCC and look forward to helping shape the student learning environment for years to come.

Sincerely,

*Jana M. Vanderhaar*

Jana Vanderhaar
Northern Section, Nevada Chapter ASLA

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April 19, 2021

Attention: Kreg Mebust, TMCC Professor of Architecture, Landscape Architecture and Residential Design
William Pennington Applied Technology Center
475 Edison Way
EDSN 207B
Reno, NV 89502

This letter is in support of the establishment of a Bachelor of Architecture program at Truckee Meadows Community College (TMCC). I have been in contact with Professor Mebust regarding the proposal for an accredited bachelor program in architecture at TMCC. The Academy for Career Education (ACE High School) believes this program represents a tremendous opportunity for not just ACE students, but all students in Northern Nevada. ACE has adopted many of TMCC's first and second year courses as a dual credit platform in TMCC's architecture program as part of our career and technical education pathways. The goal at ACE is to infuse the standard, high school core-curriculum with career-applicable training methods to provide real-world experiences for our students. We feel that every student in the Truckee Meadows deserves a chance at a terminal degree without relocation costs and high tuition fees which for many of ACE's students would be unattainable. Having an accredited bachelor program at TMCC solves this dilemma.

By supporting the Bachelor of Architecture Proposal, we see the value in our community partnership with TMCC and look forward to shaping the student learning environment for years to come.

Thank you for your thoughtful considerations. Should you have any questions, please feel free to reach out.

Respectfully,

Bob DeRuse, Director
**ACE High School**
**Education that Works**
2800 Vassar Street
Reno, NV 89502