

## Introduction

### Executive Summary

This document contains all requested information in order to inform the UNM Gallup Campus Curriculum Committee of the status of the Certificate in Construction Technology program of study. This program has a long-standing history at the UNM Gallup Campus, offering education and training in a wide-ranging program of study preparing students to enter various occupations within the building and construction industries.

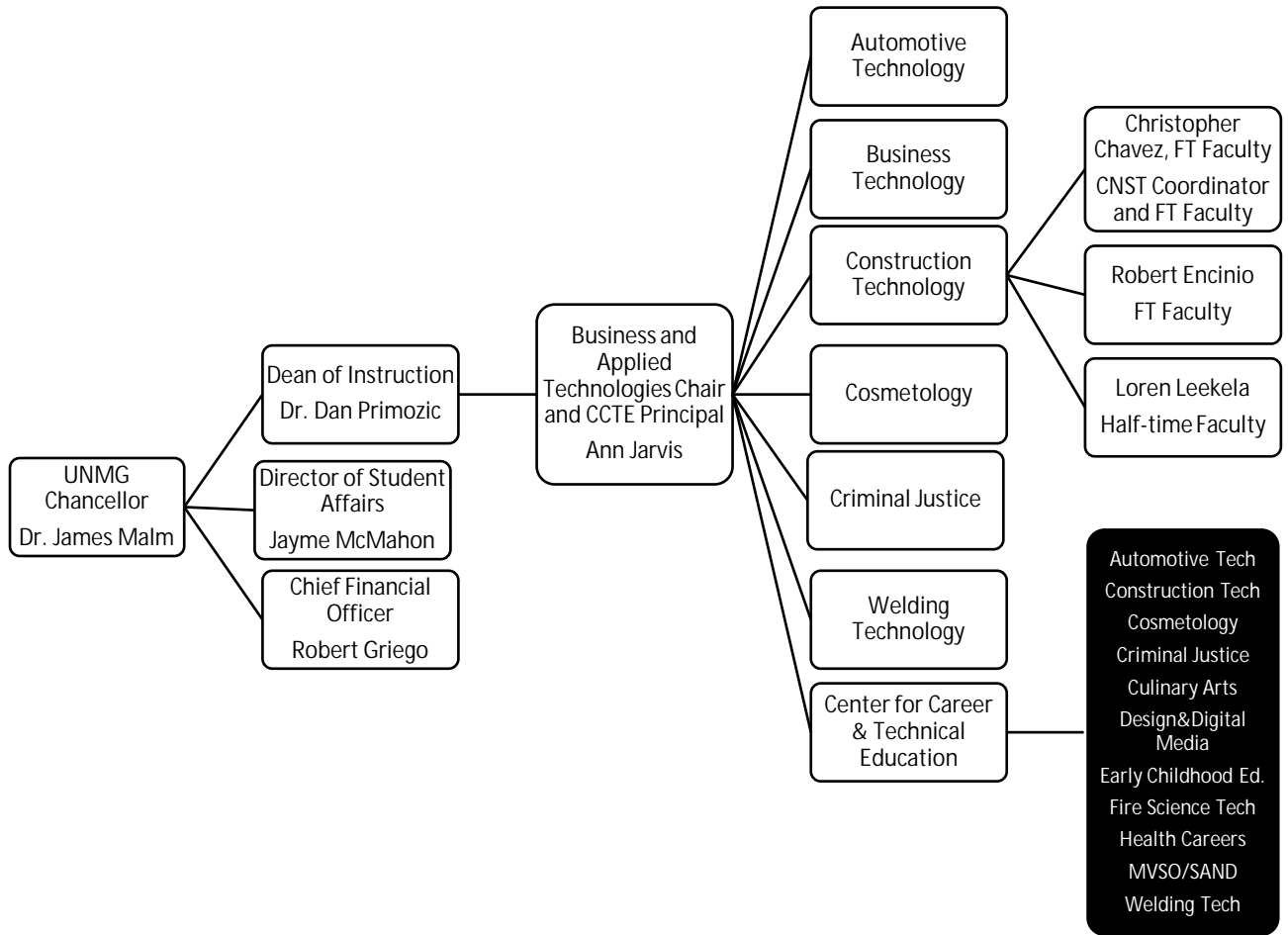
Included within this introductory section is a history of the Construction Technology Program and its organizational structure. The program of study is not accredited; however, its instructors utilize curricular materials through the National Center for Construction Education and Research (NCCER). This nation

area through NCCER.

Construction Technology, Business and Applied Technologies, has had four  
in the past eight years. It once had two administrative assistants that were  
s on the campus, and during this time an individual from the Center for Career  
was directed by the Interim Dean of Instruction to absorb the duties and  
o individuals in addition to her normal function within the CTE Program.  
changes in personnel, the recent history and records are either scattered,  
it was rather d



## Organizational Structure



## **Program Accreditation**

The Construction Technology program of study is not accredited through any outside accrediting body. It utilizes materials provided through the National Center for Construction Education and Research, but has not sought accreditation through this body.

### **Previous Program Reviews**

No records of previous program reviews for the Certificate in Construction Technology were located in the division's records. In the past several years, this division has seen four chairs and four administrative assistants; consequently, many of the materials have been moved to locations unknown or destroyed, leaving very little materials with which to work as baseline information.

## Document One: Program Goals

The Construction Technology Program at the UNM Gallup Campus strives to impart knowledge and skills to its students to best prepare them for employment within the construction industry. The integration of theoretical knowledge and hands-on skills building and experiences guide students to the professions that fall within this discipline along with the educational and experiential requirements necessary to enter said careers. Occupational outlooks and potentials are shared with students so that they truly understand the need for highly-skilled, highly-educated and in-demand workers within the building industries. Students are also made aware of the potential for advancement through education and experience within the field, by faculty members as to the possibilities that exist through personal and professional experiences and expertise.

The mission of this program of study fall into place with the mission of UNM Gallup – *prepares people to achieve their educational and professional goals in a context of respect for the traditions and values of the many groups it serves*. Construction Technology challenges its students to complete the Certificate in this discipline within a realistic timeframe and emphasizes technical skills/job-specific skills necessary for students to obtain and maintain gainful employment. Faculty members incorporate computer and technology literacy into certificate classes in order to prepare students for what will be encountered in a job setting – equipment that is utilized by companies within the construction industry and computer-based safety training and certification. Service orientation is a part of the Certificate program, as the students are engaged in campus beautification and community service projects (Habitat for Humanity).

Workplace skills taught through Construction Technology tie into the vision and mission of the UNM Gallup Campus. Clear and concise communication is accentuated in order to learn to be part of a functioning team, or to become a leader of a team who is able to delegate and direct members in a comprehensible manner. Decision making is also modeled and demonstrated, tying directly into critical thinking and problem solving. Teamwork is imperative in the construction industry and is exhibited in all classes within this Certificate programs

## Document Two: Teaching and Learning – Curriculum

The curriculum for the Certificate in Construction Technology is as follows:

CNST 101	Layout and Framing	4 credit hours
CNST 104	NCCER Core	4 credit hours
CNST 106 or CNST 208	Cabinet Building or Furniture Construction	4 credit hours
CNST 109	Plumbing Theory	3 credit hours
CNST 115	Concrete Pouring & Finishing	4 credit hours
CNST 174	Design for Green Building	4 credit hours
CNST 175	Blueprint Reading	



### **Document Three: Teaching and Learning – Continuous Improvement**

The Certificate in Construction Technology has an assessment plan that was developed and submitted in 2015; however, no reports for that plan could be located. Within this plan, the program goals listed are:

- Students demonstrate knowledge of entry-level skills for general building trades
- Students apply knowledge to solve practical problem on the work site
- Students meet the standards of approved accrediting entities (i.e., NCCER – National Center for Construction Education and Research).

The above-mentioned program goals are still relevant and applicable to the revised Certificate pdhertesCw1.3 (r)aare cat

B.1.	Students will apply computer skills, computer aided drafting, estimating or research to construction projects	<ul style="list-style-type: none"> <li>Observed lab demonstration</li> </ul>	Direct	<ul style="list-style-type: none"> <li>Pass/Fail grade on assignment rubric sheet</li> </ul>
B.2.	Demonstrate mastery of building skills or competency levels through simulated laboratory assignments, on-the-job live work projects or other work assignments	<ul style="list-style-type: none"> <li>Observation</li> </ul>	Direct	<ul style="list-style-type: none"> <li>Pass/Fail grade on assignment rubric sheet</li> </ul>
C.1.	Demonstrate professionalism, ethics, and quality work	<ul style="list-style-type: none"> <li>Observation</li> </ul>	Indirect	<ul style="list-style-type: none"> <li>Obtain employment</li> </ul>

#### **Document Four: Students**

Student recruitment occurs through very informal means – no set plan has been developed or implemented to target specific groups of individuals for enrollment. A solid audience that is ripe for recruiting are the secondary students who are dually enrolled within the Center for Career and Technical Education (CCTE). These students are introduced to this program of study while they are seniors in high school and are dually enrolled in eight credit hours per semester during their. These credit hours articulate into the Certificate in Construction Technology, giving the students a head start on their college careers.

Per the Carl D. Perkins Grant initiative, the entih.7 (04 Jh.7)4.9 (h)-0(e)18.8 ( )JJ-or P204434.1 (c)6 (u)-0.8 -14n t5er dn thr

Included is a listing of the graduates of the Certificate in Construction Technology program of study:

Semester	Number of CNST Certificate Graduates
S17	01
F17	00
S18	01
F18	01

Academic Period	Headcount	Fall Headcount	Average per Program of Study	Average of UNMG Degree-Return Rate	+/-
F13 – F14	32	2	6.06%	37.71%	-31.65%
F14 – F15	44	4	9.52%	40.60%	





### **Document Six: Resources and Planning**

This program of study relies on the University's operation budget in order to function. Approximately \$12,000 is allocated per year to purchase and support instructional materials. Faculty salaries and also covered within the University budget. Several



## Document Seven: Facilities

The Construction Technology program is housed in a designated building for this discipline. The building houses two large spaces, each doubling as classroom and shop/lab space; the building also has two faculty office areas and restrooms. A locked storage yard is adjacent to the building, in which projects, trailers, and equipment is housed. Student parking is also adjacent to the building.

The building is woefully outdated for the size and scope of the program of study and the number of students enrolled. Ideally, a building for this program should have at minimum two classrooms, two shops/labs, offices, restrooms, equipment/tool storage, outdoor storage, student storage/lockers, and a computer lab. Currently, access to the internet is spotty and inconsistent, which hampers teaching and learning activities.

This program was slated to receive a portion of a new building (Center for Career and Technical Education and Innovation) on campus; however, legislative funding evaporated, and now this program, along with other career and technical education programs of study (Automotive Technology and Welding Technology) are eligible to share up to three million dollars for the purpose of renovating existing space. At this point in time, the Construction Technology Building has connectivity issues, water leaks, poorly placed parking spaces for those with mobility issues, and classroom/lab spaces that simply do not suffice for their intended uses, as they are used for both classroom and lab simultaneously. The program of study

can be found at [www.cte.k12.tx.us](#)

## Document Eight: Program Comparisons

Other institutions in our geographical area that offer certificate programs in Construction Technology include:

Institution	Location	Program Title
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### **Document Nine: Future Direction**

It is the hope of the Construction Technology program of study to become more engaged in work-based learning within the greater Gallup community. Several years ago, Sunwest Bank (now Pinnacle Bank) donated a house to this program. The house was utilized as a live learning tool for Construction Technology students from the Center for Career and Technical Education through those seeking an Associate of Applied Science Degree in this discipline. Many hands and manpower hours were put into repairing, renovating, and restoring this home. The project took several years to complete, as this was the initial type of project of its kind. After the dust literally settled, the home, which was also zoned for a business, was sold and the profit was to have been rolled over into another similar project. That has yet to occur.

Christopher Chavez, coordinator for this program of study, is proposing to use those funds to purchase another house to repair, renovate, and restore utilizing green and alternative building techniques. The finished project would be sold, and the money recycled into another similar project. This type of project would afford the students and faculty the ability to gain valuable hands-on learning experiences that cannot be replicated in a shop or lab setting. Students gain and grasp authentic, realistic and meaningful insights as to how an actual construction/building site operates. The students would work as crews, much