

STUDENT ADVISING HANDBOOK

Construction Management Program

**Department of Engineering Technologies, Safety, and Construction
Central Washington University
2020-2021**



Construction Management Program

- I Introduction**
- II The CMGT Program**
 - ACCE Accreditation
 - Career Opportunities
- III Curriculum**
 - General University Requirements
 - CMGT Major Requirements
 1. Required Courses
 2. Proposed Plan of Study
- IV Admission to the Program**
- V Advising and Assistance**
 - Who will be your advisor?
 - When, where and how will you meet with your advisor?
- VI Academic Performance**
- VII Student Ethics and Conduct**
- VIII Student Organizations and Summer Employment**
- IX Use of Facilities**
- X Scholarships**
- XI Program and Student Assessment**
 - Program Mission
 - Intended Student Outcomes
 - Assessment
 - AIC Certified Professional Constructor, Level I Exam
 - Exit Interview
 - Alumni Survey
- XII Important Documents**
 - Pre-Major/Major Application
 - Major Application Checklist
 - Detail of Work Experience Form
 - Construction Management Academic Plan of Study
 - Construction Management Course Offerings

Appendices:

- Application Sample Forms
- Application General Information
- Construction Management Online Application Submission Process

I Introduction

Welcome to the Engineering Technology, Safety and Construction (ETSC) Department and to the Construction Management (CMGT) program. This guide was prepared as a supplement to information found in the Undergraduate/Graduate Catalog and the class schedule and is intended to assist students in planning and completing a Bachelor of Science Degree in Construction Management.

The information contained in this guide is not a substitute for the catalog or class schedule. It should be noted that it is the student's responsibility to become familiar with important dates, deadlines, regulations and rules contained in the catalog and class schedule. An electronic version of the CWU catalog is available on Central's web site: www.cwu.edu. A schedule of classes can be viewed on-line.

II The CMGT Program

The four-year Bachelor of Science Degree in Construction Management is one of a number of degrees offered through the ETSC Department, which is part of the College of Education and Professional Studies (CEPS). The program is housed in the Hogue Technology Building, and most of the CMGT courses meet in Hogue.

The program has averaged between 125 and 175 students, with approximately 42 students graduating each year. Smaller class size allows individual attention and a broad range of exposure to all aspects of construction.

Additional information may be obtained by visiting the Construction Management web site at: <https://www.cwu.edu/engineering/construction-management>

ACCE Accreditation

The Construction Management program at Central Washington University was fully accredited in 1992 by the American Council for Construction Education, and reaccredited in 1997, 2003, 2009 and 2015. Central is currently one of approximately 75 baccalaureate construction programs nationwide accredited by ACCE.

Career Opportunities

Recent CMGT graduates have found employment with local, national and international construction firms, with design firms and material suppliers. Others are currently working for public agencies, performing inspection, supervision and contract administration. Typical job titles include project engineer, estimator, project coordinator and assistant project manager.

You can also visit Central's Career Services website for upcoming interviews and events: <http://www.cwu.edu/career/>

III Curriculum

- **General University Requirements**

In **addition** to the University General Education requirements students must complete the course work for the CMGT major.

Feel free to discuss the general education requirements with your academic advisor at any time. General Education Requirements can be viewed on their web page at <http://www.cwu.edu/general-education/> and a worksheet is provided at:

<https://www.cwu.edu/general-education/sites/cts.cwu.edu.general-education/files/GE%20framework%2004.05.19.pdf>

- **CMGT Major Requirements**

Many courses require prerequisites. It is imperative that each student meet with his or her assigned faculty advisor each quarter prior to registration. There are two options within the program; the “General Construction” and “Heavy/Civil Construction” options.

1. Required Courses

MATH 172	Calculus I	5 cr		CMGT 101	Intro to CMGT	3 cr
MATH 173	Calculus II	5 cr		CMGT 201	CMGT Computer Applications	3 cr
GEOL 101 or 107	Geology w/ Lab	5 cr		CMGT 265	Plan Reading and Documents	3 cr
PHYS 181	Physics	5 cr		CMGT 267	Plane Surveying	4 cr
BUS 241	Business Law	5 cr		CMGT 320	Building Electrical Systems	3 cr
ECON 201	Micro Economics	5 cr		CMGT 343	Estimating I	4 cr
ACCT 301	Accounting	5 cr		CMGT 344 or 345	Estimating II	4 cr
MGT 380	Management	5 cr		CMGT 346 or 347	Methods and Materials	4 cr
COM 207 or 345	Public Speaking	4 cr		CMGT 441 or 440	Wood and Steel Constr. or Temporary Structures	4 cr
ETSC 161	CAD	3 cr		CMGT 442 or 443	Building Mechanical Systems or Heavy Civil Utilities	
ETSC 301	Project Cost Analysis	4 cr		CMGT 444 or 445	Contract Documents	4 cr
ETSC 311	Statics	4 cr		CMGT 450	Soils and Foundations	4 cr
ETSC 312	Strength of Materials	4 cr		CMGT 447	Construction Scheduling	4 cr
SHM 323	Construction Safety	4 cr		CMGT 455 or 456	Project Management	4 cr
				CMGT 460 or 461	Concrete or Pavements	
				CMGT 485	Constr. Accounting and Finance	4 cr
				CMGT 488	Professional Certification	1 cr
				CMGT 495A and 495B or CMGT 481	Competition Preparation or CMGT Capstone	4 cr
				CMGT 452 or ETSC 490 (Electives)	LEED Construction (<i>offered every other year</i>) or Cooperative Field Experience (Summers)	4 cr

2. Proposed Plan of Study

(KXPX) = Courses that meet new general education requirements, QR = Quantitative Reasoning, CE = Culminating Experience

General Construction Option				Heavy Civil Option			
Freshman							
Fall							
ENG 101	Academic Writing I: Critical Reading and Responding (I. Engage)	4 cr		ENG 101	Academic Writing I: Critical Reading and Responding (I. Engage)	4 cr	
UNIV 101	Academic Advising Seminar	1 cr		UNIV 101	Academic Advising Seminar	1 cr	
CWU 184	First Year Experience (I. Engage)	4 cr		CWU 184	First Year Experience (I. Engage)	4 cr	
MATH 153	Pre-Calculus I (QR)	5 cr		MATH 153	Pre-Calculus I (QR)	5 cr	
Winter							
CMGT 101	Construction. & The Built Environment	4 cr		CMGT 101	Construction. & The Built Environment	4 cr	
MGT 200	Academic Writing II: Essential Skills for Business Professionals	5 cr		MGT 200	Academic Writing II: Essential Skills for Business Professionals	5 cr	
GEOL 101/lab or GEOL 107/GEOL 101 lab	Physical Geology (GEOL 101) or Earth's Changing Surface (GEOL 107) + Geol 101 Lab (K7P3, K7P4, or K7P6)	5 cr		GEOL 101/lab or GEOL 107/GEOL 101 lab	Physical Geology or Earth's Changing Surface + Geol 101 Lab (K7P3, K7P4, or K7P6)	5 cr	
MATH 154	Pre-Calculus II (QR)	5 cr		MATH 154	Pre-Calculus II (QR)	5 cr	
Spring							
Gen Ed.	Creative Expression (K3PX)	4 cr		Gen Ed.	Creative Expression (K3PX)	4 cr	
Gen Ed.	Global Dynamics (K4PX)	4 cr		Gen Ed.	Global Dynamics (K4PX)	4 cr	
ETSC 161	Architectural CAD	3 cr		ETSC 161	Architectural CAD	3 cr	
MATH 172	Calculus I (QR)	5 cr		MATH 172	Calculus I (QR)	5 cr	
Sophomore							
Fall							
CMGT 265	Plan Reading and Construction Documents	3 cr		CMGT 265	Plan Reading and Construction Documents	3 cr	
CMGT 201	Comp. Applications in Construction	3 cr		CMGT 201	Comp. Applications in Construction	3 cr	
MATH 173	Calculus II (QR)	5 cr		MATH 173	Calculus II (QR)	5 cr	
PHYS 181	General Physics with lab (QR)	5 cr		PHYS 181	General Physics with lab (QR)	5 cr	
Winter							
Gen Ed.	Humanities (K5PX)	4 cr		Gen Ed.	Humanities (K5PX)	4 cr	
ETSC 311	Statics	4 cr		ETSC 311	Statics	4 cr	
BUS 241	Business Law	5 cr		BUS 241	Business Law	5 cr	
Spring							
CMGT 267	Plane Surveying with lab	4 cr		CMGT 267	Plane Surveying with lab	4 cr	
ETSC 312	Strength of Materials	4 cr		ETSC 312	Strength of Materials	4 cr	
SHM 323	Construction Safety	4 cr		SHM 323	Construction Safety	4 cr	

Refer to the following link for the General Education Framework:

<https://www.cwu.edu/general-education/sites/cts.cwu.edu/general-education/files/GE%20framework%2004.05.19.pdf>

(KXPX) = Courses that meet new general education requirements, QR = Quantitative Reasoning, CE = Culminating Experience

General Construction Option				Heavy Civil Option			
Junior							
Fall							
CMGT 343	Construction Estimating I	4 cr		CMGT 343	Construction Estimating I	4 cr	
CMGT 346	Const. Materials and Methods	4 cr		CMGT 347	H/C Methods and Materials	4 cr	
ACCT 301	Financial Accounting (K8P6)	5 cr		ACCT 301	Financial Accounting (K8P6)	5 cr	
ECON 201	Micro Economics (K6P5 or K6P6)	5 cr		ECON 201	Micro Economics (K6P5 or K6P6)	5 cr	
Winter							
CMGT 320	Building Electrical Systems	3 cr		CMGT 320	Building Electrical Systems	3 cr	
CMGT 344	General Construction Estimating II	4 cr		CMGT 345	H/C Construction Estimating II	4 cr	
CMGT 444	Codes, Contracts and Specifications	4 cr		CMGT 445	H/C Contract Law	4 cr	
CMGT 442	Building Mechanical Systems	3 cr		COM 207/345	Survey of Oral Comm./Business and Professional Speaking	4 cr	
Spring							
COM 207/345	Survey of Oral Comm./Business and Professional Speaking	4 cr		CMGT 443	Heavy Civil Utilities	3 cr	
CMGT 455	Principles of Const. Management	4 cr		CMGT 456	Principles of H/C Const. Manage.	4 cr	
MGT 380	Organizational Management (K6P6)	5 cr		MGT 380	Organizational Management (K6P6)	5 cr	
Senior							
Fall							
CMGT 447	Construction Scheduling	4 cr		CMGT 447	Construction Scheduling	4 cr	
CMGT 450	Soils and Foundations	4 cr		CMGT 450	Soils and Foundations	4 cr	
CMGT 495 A	Competition Preparation (IV. CE)	2 cr		CMGT 495 A	Competition Preparation (IV. CE)	2 cr	
Winter							
CMGT 441	Wood and Steel Construction	4 cr		CMGT 440	Temporary Structures	4 cr	
CMGT 488	Professional Certification	1 cr		CMGT 488	Professional Certification	1 cr	
ETSC 301	Project Cost Analysis	4 cr		ETSC 301	Project Cost Analysis	4 cr	
CMGT 495 B	Competition Preparation (IV. CE)	2 cr		CMGT 495 B	Competition Preparation (IV. CE)	2 cr	
Spring							
CMGT 460	Concrete Construction	4 cr		CMGT 461	Pavement Design And Construction	4 cr	
CMGT 481	CMGT Capstone (or CMGT 495A and CMGT 495B) (IV. CE)	4 cr		CMGT 481	CMGT Capstone (or CMGT 495A and CMGT 495B) (IV. CE)	4 cr	
CMGT 485	Construction Accounting and Finance	4 cr		CMGT 485	Construction Accounting and Finance	4 cr	
CMGT Elective	Construction Management Elective (CMGT 452 or ETSC 490)	4 cr		CMGT Elective	Construction Management Elective (CMGT 452 or ETSC 490)	4 cr	

IV Admission to the Program

Admission to the university and the construction management major does not assure admission to the CMGT program. A new electronic process has been established to submit applications due to the COVID-19 situation. Please carefully follow this process so your application gets submitted properly. As part of the process, each student will verify their access to

Rationale: Requirements for admission to the **Professional Program** have been established to assure that incoming students have an adequate background in mathematics and English composition. The intent is to increase the chance of success of students once they enter the program and to manage limited program resources, such as computer workstations and laboratory equipment.

Requirements and Procedure: Admission to the Professional Program is typically a two-step process. The first step is to become a Construction Management major and the second is to apply for the Construction Management **Professional Program**.

Students who are in the major but not the **Professional Program**, with advisor permission, are eligible to enroll in 100 or 200 level CMGT courses and any non-CMGT course for which they have the prerequisites. Students **may apply at any time** for major status by contacting their advisor and completing a major application form.

A **major** in the Construction Management program is a student who has completed the coursework and accompanying requirements stated below and has been accepted into the major. Majors are eligible to register for upper level (300 and 400 level) CMGT courses with advisor approval.

- Deadline: Applications will be accepted and reviewed once a year. **All applications are due on April 20 at 1:00 PM (if April 20 falls on a weekend, applications are due the following Monday).**
- Applications must be submitted program application OneDrive on or before the specified date and time
- Admission to the program is limited to 42 students per year.
- Although waivers may be considered, **students must complete the following prior to applying** for the major:

Academic Writing I and Academic Writing II (or equivalent) courses must be completed with a grade of "C" or better.

Math 153 and 154 (or equivalent) with a grade of "C" or better.

- Applicants must *not be on academic probation at the time of application*

Application Process: If applying for entry into the major, each student is required to submit the following items listed below by the application deadline using the online process through OneDrive for Business (ONFB), see appendix for process. Items 1, 2, 4, and 6 are forms to be downloaded and completed by the prospective student:

1. A completed **Construction Management Application Checklist form** to be downloaded from the Construction Management website. A sample form is shown near the end of this handbook.
2. A completed **Application for Major form** to be downloaded on the construction management website. A sample form is available near the end of this handbook.
3. Unofficial copies of all transcripts, including transcripts indicating coursework taken at other institutions (A CAPS report may be used for the CWU transcript). The student **must highlight** all completed courses and corresponding grades on the transcripts that *pertain to entrance requirements*

for the major. The latest CWU transcript must indicate that the student is in good academic standing, as defined by the catalog.

4. A specific, realistic **Construction Management Academic Plan of Study form** prepared in table format to be downloaded from the Construction Management website and electronically signed by the student's academic advisor that includes a quarter-by-quarter list of **ALL** remaining courses that will lead to graduation (a template is available near the end of this handbook, as well as a list of course offerings). A sample form is available near the end of this handbook in the forms appendix.
5. A current resume.
6. A **Work Experience Detail form** to be downloaded from the Construction Management website. A sample form is available near the end of this handbook in the forms appendix.
7. A signed business letter, no more than one page in length, addressed to the Construction Management Professional Program Selection Committee, detailing the following items:
 - Student's work experience
 - Their academic goals and objectives
 - Address why the student wishes to enter the CMGT **Professional Program** and student's time to completion of the degree.

The letter must be addressed to:

Construction Management Major Selection Committee
c/o "your advisor's name"

ETSC Department
Central Washington University
400 East University Way
Ellensburg, WA 98926-7584

Note:

It is the student's responsibility to complete the business letter in the correct requested format. CMGT professors will not review letters prior to submission to the program. It is the assumption of the program that proper writing techniques were established in previous coursework.

Students should access tutoring opportunities. For all tutoring, be aware there is a scheduling process students will need to follow, *plan ahead*. Allow time to work with tutors on the letter, it may take more than one session to review the letter. **The writing centers are not an editing or proofreading service.**

CWU Writing center website: <https://www.cwu.edu/academic-success/writing-center/welcome>

For help in writing the letter or to have the letter reviewed online follow www.etutoringonline.org for zoom tutoring in the writing lab section of the zoom. All students will need to create an account following the link, make sure to select the proper location for CWU. Students can either schedule a time or drop in follow the schedule for the subject area "Writing."

Students can also contact the Academic Success Center for writing help. Through TutorTrac or CWU Tutoring within MyCWU.

Selection Criteria: Using the following objective criteria the CMGT selection committee will determine the top 42 students for acceptance into the CMGT program each academic year. If not successful, students may retake classes and reapply the following year.

Course	Credits	Grade (e.g. 3.0, 3.3, etc)	Credits x Grade x 2	<i>Note: Math scores will be taken as the highest two grades in pre-calculus and calculus classes.</i>
Math				
Math				
Academic Writing I				
Academic Writing II (K1)				
			Sum/(credits): 8 pts possible	

Construction Management Selection Score Sheet

Time to Completion of Degree	Possible Score	Score
Three years	0	
Two years plus fall and winter quarter	0.25	
Two years plus one fall quarter	1.25	
Two years	1.50	
		1.50 pts possible

Work Experience (Include Work Experience Detail Form)	Possible Score	Score
No experience	0.00	
One summer, not construction related	0.25	
One summer construction-related experience, not with a construction company	0.75	
Two or more summers construction-related summer experience., not with a construction company	1.00	
One summer construction experience	1.25	
One summer construction experience plus one summer construction-related experience	1.50	
Two summers construction experience	1.75	
Six months or more continuous construction experience or three or more summers	2.00	
		2.00 pts possible

Letter	Possible Score	Score
No letter	0	
Unprofessional letter	0.10	
Three or more errors (unsigned, not dated, spelling/grammar)	0.20	
Two errors (unsigned, not dated, spelling/grammar)	0.30	
One error (unsigned, not dated, spelling/grammar)	0.40	
Excellent letter with no grammar/spelling errors	0.50	
		0.50 pts possible

Summary of Scoring

Item	Possible Score
GPA (in four courses above) x 2	8.00
Time to Completion of Degree	1.50
Work Experience	2.00
Letter	0.50
Total	12.00

Maintaining Major Status:

In addition to meeting the academic standards of Central Washington University, once admitted to the CMGT program students are expected to meet the following standards specific to the program:

- A "C" grade or better must be achieved in CMGT 343, Construction Estimating I, in order to take CMGT 344, Construction Estimating II or CMGT 345, Heavy Civil Estimating II.
- A "C" grade or better must be obtained in CMGT 346 or CMGT 347, Construction Materials and Methods, in order to take 400 level CMGT courses.
- If a CMGT major withdraws from Central for more than one quarter, he/she must reapply to re-enter the program the following April.
- A serious breach of ethical conduct may result in a student being dropped from the major.
- It is expected that all students will attend all class sessions and follow the attendance policy set by the course instructor. Students who do not attend class regularly for CMGT courses will be reported and reviewed by the major selection committee.

V Advising and Assistance

Who will be your advisor?

Students interested in the CMGT program are assigned a faculty advisor based on the first letter of the student's last name:

Student Last Name	Advisor	Office	Phone	Email
A-F	Warren Plugge	Hogue 300A	963-2427	wplugge@cwu.edu
G-R	David Martin	Hogue 300E	963-1770	David.martin@cwu.edu
S-Z	Warren Plugge	Hogue 300B	963-2427	wplugge@cwu.edu
General Education	Tom Spencer	Hogue 203G	963-3423	spencerT@cwu.edu

When, where and how will you arrange to meet with your advisor?

The same faculty advisor will likely advise each student as long as that student remains interested in the CMGT program. As soon as the class schedule becomes available each quarter, usually about two weeks prior to pre-registration, advisors will post a list of sign-up times for advising on their office door. Students are responsible for meeting with their advisor **each quarter** to develop an academic plan that will meet the requirements of the University and of this major. It is the responsibility of the student, rather than the advisor, to continuously audit his/her program for successful completion of the requirements. It should be noted that students must obtain permission codes (numbers) from their faculty advisor in order to register for any CMGT course.

Advising References:

All students should be familiar with the basic tools for advising and tracking student progress through the program. Below are two references that are important for advising and developing a complete academic plan. The most important reference is for students to access their **academic record report (ARR)**. *This should be checked frequently every quarter.* Links shown below are provided to instruct students on how to reference their ARR report:

Slide 25

<https://www.cwu.edu/registrar/sites/cts.cwu.edu.registrar/files/documents/Registration%20Ready%20PowerPoint.pdf>

Slides 12-14

<http://www.cwu.edu/registrar/sites/cts.cwu.edu.registrar/files/documents/Graduation Ready.powerpoint.pdf>

VI Academic Performance

In addition to the section on "Maintaining **Professional Program** Status" (above), academic performance by Construction Management students is governed by the standards set forth in the University Catalog. Each student should become familiar with University policies pertaining to study load, withdrawal from a course, grade point average, repetition of courses, incomplete grades and scholastic standards. It should be noted that all required courses in the CMGT major (except CMGT 488 and ETSC 490) must be taken for a letter grade. If you have questions, see your faculty advisor.

VII Student Ethics and Conduct

Ethical conduct is an integral part of construction education and students in the Construction Management major are expected to take full personal responsibility to comply with those aspects of the profession that are applicable to students. The dignity of the classroom setting is important to learning. **Classroom Behavior and Academic Honesty:** Students are expected to be in their seats and ready to go to work by the scheduled start of class. Normal rules of courtesy and respect will prevail during class periods.

Electronic devices (cell phones, digital readers & players, gaming devices, etc.) are to be off, inactive, or in a silent mode during class. Electronic devices may be used for taking notes and textbook access only – email, texting, game playing, web-surfing, video watching, or other similarly distracting activities are **NOT** permitted during class.

Work completed for all courses (assignments, quizzes, and exams) is expected to be yours and yours alone. Unless otherwise specified, group solutions are not acceptable for any assignment, and neither is plagiarism of information from other sources or copying of another person's work. If detected, you will fail the assignment with no opportunity to make up the work. Successive evidence of copying, including any computer files, cheating or using writings of others without proper citations during the curriculum of the Construction Management program will result in loss of a student's major status. Your attention is directed to Appendix B of the current CWU Catalog for additional information regarding this topic.

Your attention is also directed to Appendix A of the current CWU Catalog for the University's policies regarding Equal Opportunity, Affirmative Action, Gender Equity, and Sexual Harassment matters. Smoking or use of other tobacco products is not permitted in the Hogue Technology Building at any time.

VIII Student Organizations and Summer Employment

Student Organizations

Students are strongly encouraged to become involved with one or more of the student organizations representing the CMGT program:

- **The Association of Construction Managers**
This is the student chapter of the Associated General Contractors of America (AGC) and is sponsored by the AGC of Washington. The club's activities include guest speakers, field trips and community projects. Annual scholarships are also available to members of this organization. Dr. Plugge serves as the faculty advisor.
- **The Mechanical Contractors Association (MCA)**
The student chapter of the Mechanical Contractors Association, sponsored by the Mechanical Contractors Association of Western Washington (MCAWW) is open to any student with an interest in the mechanical contracting industry. Students have the opportunity to attend luncheons in the Seattle area, take field trips to job sites and apply for scholarships offered through MCAWW. Dr. Plugge serves as the faculty advisor.

- **Sigma Lambda Chi**
This is an international honorary fraternity that recognizes outstanding students in construction programs. Sigma Lambda Chi offers recognition to these students and is involved with the community through local service projects. Dr. Plugge serves as the faculty advisor.
- **The American Institute of Constructors**
The American Institute of Constructors is a national organization dedicated to enhancing and promoting the profession of "constructor"; an individual involved in the construction industry on a professional level. The AIC is one of the few organizations created specifically for individuals, as opposed to industry groups, and students enrolled in the Construction Management Program have the opportunity to join AIC for a small annual membership fee, which includes a newsletter. Membership applications are available on-line.

Summer Employment

Although not specifically required by the major, students are strongly encouraged to gain practical construction experience over the summer months. Not only will this complement their classroom education it will also help to bolster their resume when seeking permanent employment upon graduation. Employment opportunities, both for summer and permanent positions, will be announced in class and will be posted on the construction bulletin board located in the Hogue Technology Building. Students are also encouraged to establish a placement file with Career Services, located in Bouillon room 206 (phone: 963-1921 or 963-2404, email: career@cwu.edu).

IX Use of Facilities

The Hogue Technology Building is open Monday through Thursday and on Sunday evenings. Students are encouraged to fully utilize the facilities within the building. Several student areas are available as a study and break areas. Please keep them clean.

The computer labs, located in Hogue 118 and 120, are used as classrooms regularly during the week. All construction students may use the lab for construction applications, provided that a class is not in session at the time. Absolutely no food, drinks or hats are allowed in the room. Students must have approval of an instructor prior to using the plotter.

The concrete, soils and asphalt lab, located in room 105, and the mechanical-electrical lab, located in room 103, may be available to students for special applications (outside the classroom) with approval of the CMGT faculty members.

X Scholarships

Numerous scholarships are available each year for Construction Management students. The Education Foundation of the Associated General Contractors of America, the Education Foundation of the Associated General Contractors of Washington, The Master Builders Association of King and Snohomish Counties, the Mechanical Contractors Association of Western Washington and The National Association of Women in Construction all have annual scholarships. The Construction Management Industry Advisory Council for the program has established two scholarships for incoming students and Fisher Companies offers an annual scholarship to students in the program. Applications will be made available through faculty members in the program and deadlines for application will be announced in class. All students are encouraged to apply for scholarships. You can also refer to Central's Scholarship website: <http://www.cwu.edu/scholarships/> and search under "CWU Scholarships" or under "Outside Scholarships".

XI Program and Student Assessment

A comprehensive assessment program has been developed to measure how well the Construction Management Program is meeting its mission and how well the students in the program are meeting the stated intended student outcomes of the program.

Program Mission

The primary mission of the Construction Management Program is to provide the highest possible quality general construction education to undergraduate students who are preparing for careers in the construction industry.

The secondary mission is to maintain ongoing contact with the construction industry and to provide support for this industry.

Intended Student Outcomes

1. Graduates shall be able to identify and describe the legal and social aspects of the construction industry, the construction process and the construction contract systems.
2. Graduates shall demonstrate analytical skills in the area of structures, construction materials and construction finance and cost analysis.
3. Graduates shall be able to estimate, plan and schedule a small commercial/residential project using microcomputers and appropriate software.
4. Students graduating from the program shall be able to communicate clearly and effectively, both orally and in writing.
5. Graduates shall obtain employment as construction professionals in entry-level positions and shall also possess the skills, knowledge, attitude and behavior to advance within the industry.

Assessment

Instruments that are being used to measure both student and program effectiveness include the following:

AIC Certified Professional Constructor

The first step in becoming recognized as a Certified Professional Constructor (CPC) is to qualify for and pass the Constructor Qualification Examination Level 1. This is an eight-hour comprehensive written national exam has been developed by the American Institute of Constructors (AIC) and is offered at various locations nationally in spring and in fall of each year. Central serves as a test site for the spring exam. This exam is required of all graduating seniors in the CMGT program and review for the exam is incorporated into CMGT 488. **In order to graduate from the CMGT program a student must obtain a minimum score of 60% on the CPC exam.** The exam is closed book and notes and is mostly multiple-choice, although it may contain a writing component that is subjectively graded. If students pass the exam and gain additional experience and then pass the level II Constructor Qualification Examination they become certified as a professional "Constructor", a title that is likely to become much more recognized in next several years. Because the exam is comprehensive, students are strongly encouraged to keep their textbooks, notes and homework from each course as they progress through the major. Past experience indicates that students who keep and organize their course material perform relatively well on the exam. The purpose of the exam is to document that students leaving the major possess the knowledge necessary to succeed in the construction industry, in correlation with the primary mission of the program. The results of the exam are available to the program in summary form only, are kept confidential and will be used to identify weak areas within a particular course or group of courses so that action can be taken to continuously improve the educational experience.

Exit Interview

A group exit interview with seniors will be administered by the ETSC Department Chair or associate dean of CEPS spring quarter. This process, which includes both a written questionnaire and a focus group session, will address the general quality of the program, including course offerings, instruction, administration, industry support and general departmental and university facilities. The exit interview results will be used in a confidential manner to identify weak and strong areas within the program and the university as a whole, as it relates to students in the CMGT program.

Alumni Survey

Alumni who have graduated within the past five years are invited to participate in a survey that is used to identify strengths and weaknesses of the program. This information is used to make program improvements in the area of curriculum, industry and alumni relations.

XII Important Documents to Download and Save to OneDrive (Forms)

Forms listed below are to be downloaded from the construction management website and saved to the student's individual CWU OneDrive construction management application folder. Be sure to follow the naming conventions to properly store the files in the OneDrive student application folder.

- Professional Program Application Checklist Form
- Detail of Work Experience Form
- Major Application Form (to be signed by the student, your academic advisor will sign after the application has been received)
- Construction Management Academic Plan of Study (to be verified and signed electronically by your academic advisor)

Appendix A

Application Sample Forms

The forms within this appendix are sample forms. All applicants will complete the PDF forms provided on the website for submission to the Professional CMGT program.



Engineering Technologies, Safety, and Construction (ETSC) Department

Bachelor of Science Major, Pre-Major, and Minor Application

Form with fields: Name, Date, Student ID, Class Level, Email, Phone Number

Form available on-line or in Hogue 101

Major Application Check one: Major: [] Pre-Major (SHM Only): []

- Construction Management (CMGT) (COMA, COMAP)
Electronics Engineering Technology (EET) (EET, EETP)
Industrial Engineering Technology (IET) (IETBS, IETBSP)
Mechanical Engineering Technology (MET) (MET, METP)
Risk, Insurance, and Safety Management (RISM) BS: [] BAS: [] (RISMO, RISMBASO)
Safety and Health Management (SHM) (SHM, SHMP, SHMPRE)
Technology Education (Tech Ed) Check if broad area: [] (TEBA)

Are you double majoring? Yes [] No []

Minor Application

- Construction Minor (COMIN, COMINP)
Industrial Technology Minor (IETMININT)
Risk Management Minor (RIMAMIN, RIMAMINP)
Robotics and Automation Minor (ROAUMIN, ROAUMINP)
Safety and Health Management Minor (SHMMIN, SHMMINP)
Traffic Safety Education Endorsement (SHMMINTSE, SHMMINTSEP)

All Teacher Education candidates must see an Education Advisor.

Signature lines for Student and Advisor, with a statement: I understand I am to meet with my advisor each quarter.

*to be completed by the Department of Curriculum, Supervision, and Educational Leadership. Black Hall, Room 214-11. Student is accepted into Professional Education Program.

Education Advisor Signature: _____

Construction Management Major Application Checklist Form
Application is Due by 1:00 pm April 20 to the Program Director through OneDrive

Last Name	First Name	Middle Initial	Student ID Number
Preferred Email:			

Advisor

Math Requirement	Grade	Term Taken	Institution
Math 153 with a "C" minimum			
Math 154 with a "C" minimum			

English Requirement	Grade	Term Taken	Institution
Academic Writing I with a "C" minimum			
Academic Writing II with a "C" minimum			

Other Requirements (Include these with your application in the following order)	
<input type="checkbox"/>	This completed checklist
<input type="checkbox"/>	Business Letter to Construction Management Selection Committee
<input type="checkbox"/>	Resume
<input type="checkbox"/>	Work Experience Detail form
<input type="checkbox"/>	Application for Major Form, completed and signed by student (advisor will sign later)
<input type="checkbox"/>	CWU Transcript (unofficial or Course History available on MyCWU is acceptable; <i>highlight courses noted above</i>)
<input type="checkbox"/>	All Other Transcripts
<input type="checkbox"/>	Academic Plan listing all courses leading to graduation, signed by your advisor

**Construction Management Program
Detail of Work Experience Form**



Include all relevant experience *after* high school graduation

Year of graduation from high school: _____

Dates (include month and year). List most recent first	Company, location and type of work	Full-time or part time? Hours/week?	<ul style="list-style-type: none"> • Duties and Responsibilities • Supervised any employees?

Construction Management Academic Plan of Study Form

Student Name: _____

Student ID Number: _____

Fall 2021		Winter 2022		Spring 2022	
Course Name and Number	Credits	Course Name and Number	Credits	Course Name and Number	Credits
Total Credits		Total Credits		Total Credits	

Fall 2022		Winter 2023		Spring 2023	
Course Name and Number	Credits	Course Name and Number	Credits	Course Name and Number	Credits
Total Credits		Total Credits		Total Credits	

Fall 2023		Winter 2024		Spring 2024	
Course Name and Number	Credits	Course Name and Number	Credits	Course Name and Number	Credits
Total Credits		Total Credits		Total Credits	

ETSC 490: ____ Yes Summer _____, No ____ (check to confirm)

Advisor Signature: _____ Date: _____

Appendix B

Application General Information

Construction Management Course Offerings

Note: This table is provided to indicate which CMGT and ETSC courses are typically offered during specific quarters. Students should be aware that most courses have prerequisites and there are other courses that must be taken to complete the major. Students should consult with their academic advisor. For example, students must complete math up through MATH 173, PHYS 181, BUS 241.

Fall		Winter		Spring	
Course Name & Number	Credits	Course Name & Number	Credits	Course Name & Number	Credits
CMGT 201	4	CMGT 101	4	CMGT 101	3
CMGT 265	3	CMGT 265	3	CMGT 201	3
CMGT 343	4	CMGT 320	3	CMGT 267	4
CMGT 346/347	4	CMGT 344/345	4	CMGT 455/456	4
CMGT 452 (offered every other year)	4	ETSC 161	3	ETSC 312	4
ETSC 161	3	ETSC 301	4	SHM 323	3
ETSC 301	4	ETSC 311	4		
ETSC 311	4	ETSC 312	4		

Fall		Winter		Spring	
Course Name & Number	Credits	Course Name & Number	Credits	Course Name & Number	Credits
CMGT 447	4	CMGT 440/441	4	CMGT 443	3
CMGT 450	4	CMGT 442	3	CMGT 460/461	4
CMGT 495A	2	CMGT 444/445	4	CMGT 481	4
		CMGT 488	1	CMGT 485	4
		CMGT 495B	2	CMGT Elective	4

Suggested Academic Course Plan

Below is a suggested course plan (assuming Math 153 and 154 are complete). While not required, students can easily complete a Business Administration Minor by completing MKT 360 (can be used for Gen Ed and Minor) and HRM 381 in addition to their major course requirements. All ETSC 490's must be completed during the summer quarter. *Note: Both general and heavy/civil courses are incorporated in this plan.*

Freshman					
Fall		Winter		Spring	
ENG 101 (I. Engage)	4	MGT 200 (K1P2 or K1P3)	4	CMGT 101	3
SHM 184 (I. Engage)	1	GEOL 101 or 107 (K7P6)	5	ETSC 161	3
GEN ED (K3PX)	5	MATH 172 (QR)	5	MATH 173 (QR)	5
GEN ED (K5PX)	5			GEN ED (K4PX)	5
CREDITS	15	CREDITS	14	CREDITS	16
Sophomore					
Fall		Winter		Spring	
CMGT 265	3	ETSC 311	4	CMGT 267	4
CMGT 201	3	BUS 241 (K2P6)	5	ETSC 312	4
PHYS 181 (QR)	5	Humanities (K5PX)	4	CMGT 201	3
ECON 201 (K6P5 or K6P6)	5			SHM 323	4
CREDITS	16	CREDITS	13	CREDITS	15
Junior					
Fall		Winter		Spring	
CMGT 343	4	CMGT 320	3	CMGT 455/456	4
CMGT 346/347	4	CMGT 344/345	4	CMGT 443	3
MKT 360 (K2PX)	5	CMGT 444/445	4	MGT 380 (K6P6)	5
		CMGT 442	3	COM 345/207	4
CREDITS	13	CREDITS	14	CREDITS	16
Senior					
Fall		Winter		Spring	
CMGT 450	4	CMGT 440/441	4	CMGT 460/461	4
CMGT 447	4	CMGT 488	1	CMGT 481 (CE)	4
ACCT 301 (K8P6)	5	ETSC 301	4	CMGT 485	4
				CMGT ELECTIVE	4
CREDITS	13	CREDITS	9	CREDITS	16

Appendix C
Construction Management Online
Application Submission Process

Construction Management Application Submittal Process

The following process will be used to submit the construction management application materials online for CWU students. All parts of the application will be comprised of separate files for the individual parts of the application. **Note:** if you have not been accepted to CWU please contact your construction management advisor to submit your application.

Be sure to complete all of the necessary components stored in a folder on your computer of the application material prior to creating the shared application folder.

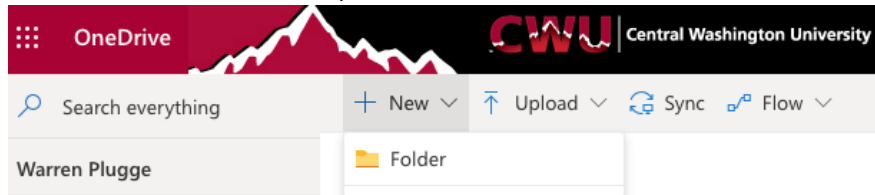
All of these items are to be included in your application folder (all documents are to be PDF documents and file names shall follow naming conventions as shown):

1. Construction Management Application Checklist Form (1Pluggechecklist.pdf)
2. Business Letter to Construction Management Selection Committee (2Pluggebusinessletter.pdf)
3. Resume (3Pluggeresume.pdf)
4. Work Experience Detail Form (4Pluggeexperiencedetail.pdf)
5. Application for Major Form – completed and signed by student (advisor will sign later) (5Pluggemajorform.pdf)
6. CWU Transcripts in PDF document format (unofficial or Course History available on MyCWU (highlight Math and Academic Writing required courses) and a PDF of all other transcripts if applicable (if **Math or Academic Writing courses are on these transcripts, highlight them**) (6Pluggetranscripts.pdf)
7. Academic Plan Form listing all course leading to graduation, reviewed and signed by your advisor (7Pluggeacademicplan.pdf)

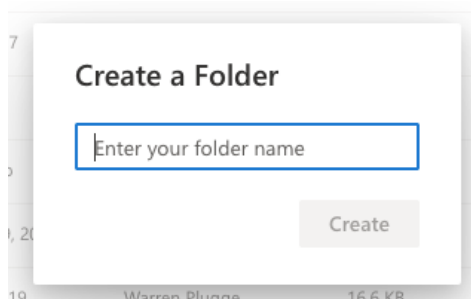
All applicants will create a ONEDRIVE FOR BUSINESS share folder as described below to submit the application components listed above.

ONEDRIVE FOR BUSINESS: Create and Share Folder Process

- Log in to Office.com using username@cwu.edu (NOT first.last@cwu.edu) and your CWU password
- Click the OneDrive tile
- In OneDrive, click the New dropdown and then click **Folder**




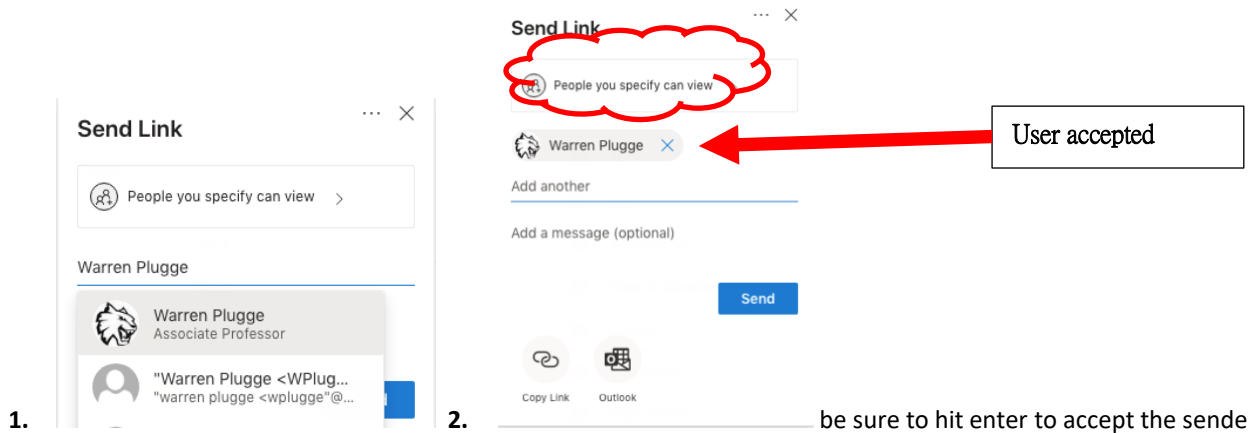
- Enter a name for your folder (Name for your folder lastnamefirstname (Ex. PluggeWarren) will be the file name), and click Create.



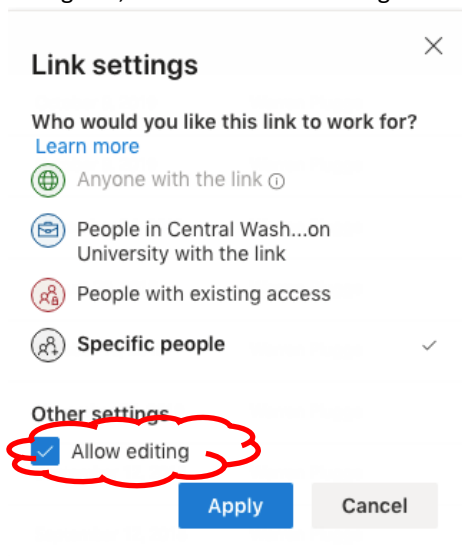
- Navigate to the new folder; it will be added to your OneDrive in Alpha order and have shoutout marks at the beginning of the file name which are new items



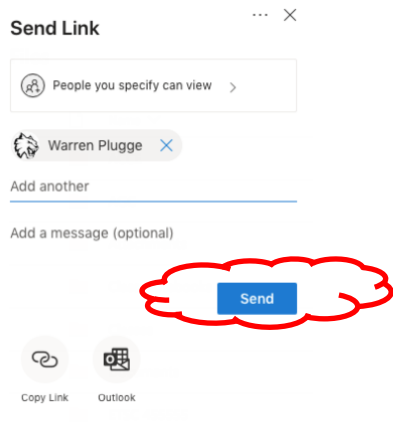
- First select the folder, then click the 'Share' icon , this will create a Send Link dialog box.
- In the 'Send Link' dialog box, click to modify the link. Type the name of the individual you are sharing with "**Warren Plugge**" (there should be an option to select Warren Plugge as a default email), select the correct user, add an optional message (if needed). Make sure the user is accepted.



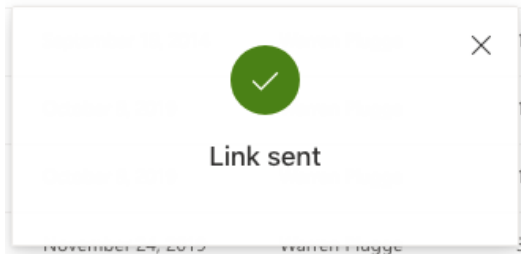
- Select "People you specify can view" (shown above), this will bring up the Link Settings dialog box. In the 'Link Settings' dialog box, check the 'Allow Editing' check box and click 'Apply'



- Once back in the send link dialog box click “Send”



- If the link has been sent correctly you will get a picture as shown below:



This is good! The recipient will get an email notifying them the file was shared and application material is ready to be accepted.

- Files can be uploaded or use the drag/drop functionality from desktop/laptop to the folder to add your application materials if edits need to be made.

All application materials must be submitted by 1:00pm on April 20.

- From here the program director will take your application packet in this folder and move it to a secure file for the committee to review the application materials.