

# MSCM Student Handbook

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TEXAS A&M UNIVERSITY

Construction Science

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Welcome to the M.S. in Construction Management Program at Texas A&M University!

### **Pioneering Excellence Since 1946**

Embark on a transformative journey with the Department of Construction Science, a beacon of excellence in construction higher education since 1946. As the largest construction education program in the nation, boasting approximately 1,100 undergraduate and 40 graduate students, we are thrilled to have you join our thriving community of future industry leaders!

### **Your Pathway to a Flourishing Career in Construction**

Through our M.S. in Construction Management program, you will delve into a unique educational experience that seamlessly integrates technological advancements and innovative practices to enhance success in the field. Our customizable curriculum prepares students from various backgrounds, including architecture, engineering, and business, to not only excel but also innovate within the construction industry. Whether you're seeking to elevate your career or step into the construction realm, your journey begins here!

### **About the Program**

Recognized as one of the five ACCE accredited master's-level construction science degrees in the nation, our STEM-coded program provides an advanced course of study catering to both seasoned professionals and novices in construction. It's not merely a degree; it's your ticket to innovating on traditional construction methods, leveraging the latest in technology, and processing management to secure your place as a pivotal player in the industry.

### **Careers & Beyond**

Graduates of our esteemed program step into pivotal leadership roles within various sectors of the construction industry, including commercial, industrial, and residential. Additionally, the program opens pathways to further academic exploration and excellence through potential MS programs in the construction field.

### **Real-World Experience Through Internships**

In ensuring a holistic, hands-on educational experience, we mandate all our graduate students to immerse themselves in a professional internship prior to graduating, offering a unique blend of theoretical knowledge and practical expertise. Our students have explored exhilarating opportunities, contributing to projects at tech giants such as Tesla, Apple, and Amazon.

### **An Interdisciplinary Approach to Success**

Our programs stand as premiere exemplars of applied construction degrees, navigating through an interdisciplinary approach that intertwines the principles of architecture, technology, engineering, business, and project management. We empower you to transcend traditional boundaries, encouraging you to step out from behind the desk and collaboratively work onsite, ensuring every project not only succeeds but excels. We're delighted to welcome you into a program where your educational journey is not just about acquiring a degree but mastering the art and science of innovative construction management. Let's build the future together!

Welcome aboard, future leader!

The Department of Construction Science  
Texas A&M University

## INTRODUCTION

The handbook describes the policies and procedures that both prospective and enrolled students must follow while pursuing a Master of Science in Construction Science in the Department of Construction Science within the School of Architecture at Texas A&M University. This handbook, along with its supporting documents, is a must-read for all incoming MS students. The responsibility is on the student to fulfill all the requirements of the MS program and keep track of all deadlines, as outlined in the Graduate School's academic calendar.

The policies and procedures outlined in this document are meticulously crafted to align seamlessly with the established guidelines of the Texas A&M University Office of Graduate and Professional Studies (OGAPS). In the rare event that any inadvertent discrepancies are discovered between this document and the OGAPS policies, it is understood that the OGAPS policies will take precedence and be deemed the governing authority. This handbook encompasses a comprehensive overview of three distinct Master of Science programs offered by the Department of Construction Science (COSC): the In-Person Thesis, the In-Person Non-Thesis, and the Non-Thesis online program, each tailored to accommodate the diverse needs and preferences of our student body.

The COSC is proud to offer a robust graduate degree program, the Master of Science in Construction Management (MSCM), designed to cater to the evolving needs of the construction management industry. Within this framework, students aspiring to earn the MSCM degree are presented with three distinct pathways to realize their academic goals. First, the 32-hour Thesis Option is designed for those who seek a research-intensive experience, fostering an environment conducive to innovation and the generation of new knowledge in a specific area of construction management. Second, the 36-hour Non-Thesis Option offers a broader approach, introducing students to a wide spectrum of topics pertinent to construction management, aiming to enhance their understanding of the industry. Lastly, 36-hour Non-Thesis Online program provides a flexible learning environment, ensuring that students, regardless of their geographical location or work commitments, have access to a high-quality education in construction management.

The MSCM degree program operates under the vigilant supervision of the COSC Graduate Program Coordinator, a role filled through appointment by the COSC Department Head. This individual's leadership is crucial to the success of the program, and their efforts are complemented by the support and guidance of the COSC Graduate Research and Instruction Committee, ensuring that all students, whether they are pursuing their degree in-person or online, receive the best possible education and mentorship.

## ADMISSION PROCESS

As a prospective student exploring the diverse academic opportunities within the field of construction management at Texas A&M University, we encourage you to visit our dedicated websites to gain comprehensive insights into the three distinct learning pathways offered by the Department of Construction Science (COSC). If you are considering an immersive, on-campus experience, we invite you to explore our In-Person (thesis and non-thesis) Master of Science in Construction Management (MSCM) program. Detailed information about the curriculum, admission requirements, and unique opportunities associated with this option can be found at <https://www.arch.tamu.edu/academics/graduate-programs/master-of-science-in-construction-management/>. Here, you will find everything you need to make an informed decision about joining our vibrant, on-campus academic community.

Conversely, if you are seeking a more flexible learning format without compromising on quality, our non-thesis online MSCM program may be the perfect fit for your needs. This program is meticulously designed to accommodate the demands of working professionals and individuals requiring the convenience of remote learning, while still providing access to our esteemed faculty and resources. To discover more about the online learning experience, program structure, and how to apply, please visit <https://www.arch.tamu.edu/academics/graduate-programs/master-of-science-in-construction-management/>. Here, you will find a wealth of information tailored to prospective online students, ensuring you have all the necessary tools at your disposal to embark on this exciting educational journey.

No matter which pathway you choose, the COSC at Texas A&M University is committed to providing an exceptional education that prepares you for success in the dynamic field of construction management. We look forward to the possibility of welcoming you to our academic community and supporting you throughout your educational journey.

The application timelines for the In-Person and Online Master of Science programs at Texas A&M University's Department of Construction Science (COSC) are distinct, reflecting the unique nature of each learning pathway. For those interested in the immersive, on-campus In-Person MS program and looking to commence their studies in the Fall semester, it is crucial to submit your application by January 15th. This deadline ensures that prospective students have ample time to prepare for their transition to on-campus life and their upcoming academic journey.

On the other hand, the Online MS program offers a different set of deadlines to accommodate its unique admission cycle. The application period for the fall semester for the Online MS program is scheduled to run each year from August 1st to June 1st. Those who apply within this time frame will receive their admission decisions by June 31st. For students wanting to start their online education in the Spring semester, the application window is open from October 1st to November 15th. Applicants can expect to receive their admission decisions no later than December 1st, providing clarity and ample preparation time for the upcoming semester.

These carefully structured application timelines reflect the COSC's commitment to providing clear and manageable processes for all prospective students, whether they are seeking an on-campus experience or the flexibility of an online education. By adhering to these deadlines, applicants can ensure a smooth and timely transition into their chosen program, setting the stage for a successful and enriching academic experience at Texas A&M University.

#### Admission requirements

- Minimum Education: A bachelor's degree is required for admission to the master's program.
- In order to be admitted, your grade point average for the last 60 credit hours of undergraduate work should be at least 3.0 on a 4.0 scale.
- Admitted applicants who are still earning the prerequisite degree are admitted contingent on the completion of that degree. Applicants who do not meet this contingency must reapply after graduation.

Applications for admission to the MS program must include the following documents:

- A current resume
- A statement of Interest and purpose

- Three letters of recommendation from persons familiar with the applicant's academic and professional accomplishments
- GRE scores (Verbal Reasoning, Quantitative Reasoning, & Analytical Writing)
- **Online Master program only** – In addition to a bachelor's degree, you will need five years of professional experience, or you will be required to take the Graduate Record Examination (GRE). If you have five years or professional experience, you DO NOT need to take the GRE for entrance to the online masters program.
- TOEFL scores [for international applicants only]
- Official transcripts from all previous institutions

### Admission Criteria

Applicants must meet the following minimum requirements to be considered for admission:

- |   |                 |
|---|-----------------|
| • GRE total score [verbal and quantitative] | Minimum 302     |
| • GRE verbal score                          | Minimum 146     |
| • GRE quantitative score                    | Minimum 148     |
| • GRE written score                         | Minimum 3.0/4.0 |

International students must take the Test of English as a Foreign Language (TOEFL) to be considered for admission. International students must achieve a minimum score of 550 [paper-based], 80 [internet-based], or 213 [computer-based].

Admission to the MS program will be offered based on a combination of the applicant's GPA, GRE scores, statement of interest and purpose, letters of recommendation, resume, and TOEFL scores (for international students only). Applicants that do not meet the minimum admission requirements stated above may be considered for admission on a case-by-case basis.

### ELPE Examination

Upon arrival at Texas A&M University (TAMU), all international students from countries whose native language is not English must take the English Language Proficiency Exam (ELPE). International students must achieve a minimum score of 70 out of 100 on all ELPE sections before taking any MS courses, except COSC 681. Students are allowed to enroll in MS courses only if they are also enrolled in all English Language Institute (ELI) courses in their respective areas of deficiency during the same semester. International students who take the ELI courses and receive a grade of B or higher are considered to have passed the corresponding ELPE section.

A student who has not completed all ELPE requirements by the end of his or her second semester in the MS program will be put on scholastic probation. The only international students exempt from this requirement are those who have earned a four-year baccalaureate degree or higher from accredited U.S. universities are exempt from this requirement. For further information, please visit the following website: <https://grad.tamu.edu/academics/academic-success-resources/elp>.

## DEGREE REQUIREMENTS

The MS program in Construction Science follows the MS requirements as described in the TAMU Graduate Catalogue: (1) For the in-person thesis student, a minimum of 32 hours is required; (2) For the non-thesis MS student, a minimum of 36 hours is required on the degree plan. The MS degree in Construction Science includes the following categories of courses:

Table 1 outlines the general graduate curricula of the MS in Construction Science required of students.

**Table 1.** Semester Credit Hour Requirements by Category

Category	Thesis	Non-Thesis (In-Person/Online)
Required fundamental courses (see Table 2)	12 hours	12 hours
Research methods (see Table 2)	3 hours	N/A
Research (see Table 2)	6 hours	N/A
Seminar (see Table 2)	2 hours	N/A
Elective Courses	9 hours	24 hours
<b>TOTAL</b>	<b>32 hours</b>	<b>36 hours</b>

Students who have not completed a BS in Construction Science or a closely related discipline may be required to take undergraduate courses as prerequisites for the graduate-level courses in the degree programs. All leveling coursework will be assigned on an individual basis after a review of the student's previous coursework.

## MASTER DEGREE PROGRAM STRUCTURE AND TIMELINES

The tables in this section show the available courses for each coursework requirement category. Table 2 shows core courses required by all COSC MS students. MS Students must take all fundamental courses. However, courses in this category may be waived with sufficient evidence on the student's transcript that similar coursework has been completed previously at the graduate level, or with the approval of the student's advisory committee. If some of these courses are waived, they will be replaced with the same number of credit hours of Construction Science electives.

All MS thesis students must complete COSC690 (Theory of Research in Construction Science). COSC690 may be waived with sufficient evidence on the student's transcript that a similar coursework has been completed previously at the graduate level, or with the approval of the student's advisory committee. If COSC 690 is waived, the course will be replaced with the same number of credit hours of construction science electives.

**Table 2.** Required/Core Courses

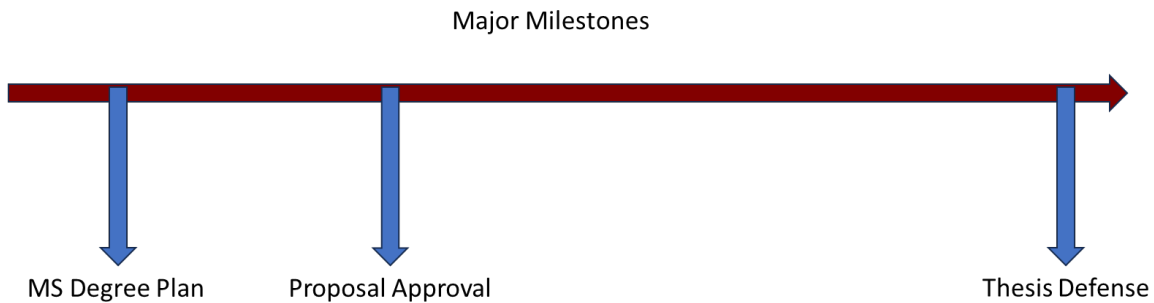
Prefix and Number	Required/Core Course Title	SCH
<b>FUNDAMENTAL COURSES</b>		
COSC 601	Construction Practices	3
COSC 602	Construction Estimating	3

COSC 603	Construction Scheduling	3
COSC 621	Advanced Project Management	3
<b>RESEARCH METHODS / RESEARCH</b>		
COSC 690	Theory of Research in Construction Science (Required)*	3
COSC 691	Research*	6
<b>SEMINAR</b>		
COSC 681	Seminar*	2

\*MS Thesis students only

### Typical Timeline (Thesis)

This section outlines the typical milestones needed to complete the Construction Science MS program at Texas A&M University. There are a total of five milestones: completion of qualifying exam (qualifying paper), MS degree plan, preliminary exam, and MS thesis defense.



**Figure 1.** COSC MS Degree Milestones (In-Person Thesis Option)

#### Initial Steps (selecting advisor, degree plan, submission of proposal, etc.) – First Semester, Year 1

Students admitted into the MS program are expected to have an advisor and discuss a degree plan that will be suitable for them. The student admitted to the program can fill a petition for a core coursework waiver if equivalent courses as part of an MS degree or during the later years of undergraduate degree program were taken. The following steps must be taken:

- Identify which course(s) you want to seek a waiver for.
- Discuss your intention with your advisor and get his/her understanding and preliminary approval
- Submit a petition to the MS program coordinator via Graduate Programs Office describing your full justification statement with evidence (such as your transcripts and course work description and syllabus)
- The MS program coordinator will review your petition and make the final decision.

### Sample Sequence of Coursework

This section provides some guidance on a typical sequence of coursework toward the MS degree in Construction Science at Texas A&M University.



Plan of Study – Thesis Option

A student accepted to the COSC program is expected to complete this requirement in a laps of 1.5 years or 2 years. The following sample course load below is just a sample of how students can distribute their course load. The actual selection of courses may vary student by student.

Fall – Year 1

Prefix and Number	Course Title	SCH
COSC 601	Construction Practices (required)	3
COSC 602	Construction Estimating (required)	3
COSC 6XX	Elective Course	3
COSC 681	Seminar	1
<b>Total</b>		<b>10</b>

Spring– Year 1

Prefix and Number	Course Title	SCH
COSC 603	Construction Scheduling (required)	3
COSC 690	Theory of Research in Construction Science	3
COSC 6XX	Elective Course	3
COSC 681	Seminar	1
<b>Total</b>		<b>10</b>

Fall– Year 2

Prefix and Number	Course Title	SCH
COSC 621	Advanced Project Management (required)	3
COSC 691	Research	6
COSC 6XX	Elective Course	3
<b>Total</b>		<b>12</b>

Plan of Study – Non-Thesis Option

A student accepted to the COSC program is expected to complete this requirement in a laps of 1.5 years or 2 years. The following sample course load below is just a sample of how students can distribute their course load. The actual selection of courses may vary student by student.

Fall – Year 1

Prefix and Number	Course Title	SCH
COSC 601	Construction Practices (required)	3
COSC 602	Construction Estimating (required)	3
COSC 6XX	Elective Course	3
COSC 6XX	Elective Course	3
<b>Total</b>		<b>12 Credit</b>

Spring– Year 1

Prefix and Number	Course Title	SCH
COSC 603	Construction Scheduling (required)	3
COSC 6XX	Elective Course	3
COSC 6XX	Elective Course	3
COSC 6XX	Elective Course	3
<b>Total</b>		<b>12 Credit</b>

Fall– Year 2

Prefix and Number	Course Title	SCH
COSC 621	Advanced Project Management (required)	3
COSC 6XX	Elective Course	3
COSC 6XX	Elective Course	3
COSC 6XX	Elective Course	3
<b>Total</b>		<b>12 Credit</b>

**Scholarships and Fellowships**

The following two sections describe the availability of financial opportunities to cover the cost of the MS program.

**Assistantship Opportunities**

There are three different graduate assistantships available within COSC and these are the following:

1. **Graduate Assistant Teaching (GAT):** GAT hired by COSC to assist faculty members in teaching courses.
  - o International students from countries whose native language is not English must have achieved a minimum score of 80 on all sections of the ELPE before they will be considered for GAT positions.
2. **Graduate Assistant Non-Teaching (GANT):** GANT hired by COSC for tasks not directly related to teaching.

The hiring of GAT/GANT is managed by the COSC Department Head and COSC MS Program Coordinator. Available GAT/GANT positions will be advertised to all COSC graduate students as-needed. The selection and hiring process for GAT and GANT is the supervising faculty member’s responsibility, along with the coordination of the COSC Department Head and COSC Graduate Program Coordinators. This may also include screening applications and conducting interviews with candidates.

3. **Graduate Assistant Research (GAR):** GAR hired by individual faculty members for activities related to their funded research projects.

The selection and hiring process for GAR is managed solely by faculty members with adequate research or other sources of funding to financially support the graduate student.

### Additional Resources

- The **Graduate School website** is available at <https://grad.tamu.edu/>
- The **COSC School website** available at <https://www.arch.tamu.edu/cosc/>
- The **G.R.A.D. Aggies Program** – <http://grad.tamu.edu/academics/professional-development/grad-aggies>
- The **Professional Development Opportunities** program – <https://grad.tamu.edu/professional-development>

## APPENDICES

### Appendix A. Core Course Waiver Form

#### Construction Science Petition for Course Waiver



Version 1.0 (Aug. 25, 2023)

All MS students are required to complete core courses and the necessary courses in their chosen concentration area. However, they have the option to request a waiver for certain courses if they have already completed equivalent courses as part of their M.S. degree or during the later stages of their undergraduate program. Additionally, certain courses taken or anticipated to be taken during their MS program at Texas A&M University may be substituted for specific core/required courses, provided they are deemed equivalent to the said core/required courses within their MS curriculum. It's important to understand that a waiver does not result in the awarding of credit and will not be reflected on the academic transcript. Any course that is waived must be replaced with a course carrying the same number of credit hours. In other words, the minimum number of credit hours required to fulfill the MS coursework requirements remains unchanged. A successful petition for a course waiver must be accompanied by compelling evidence showcasing the equivalence of the course(s) the student has taken or plans to take.

#### THIS SECTION TO BE COMPLETED BY STUDENT

Date:

Last Name:

First Name:

TAMU Email:

UIN:

Concentration Area:

1st Term:

#### Courses To Be Waived

No.	Course Number	Course Title
1		
2		
3		
4		
5		

#### Rationale

Provide your rationale in a separate section and attach your evidence.

---

Student Name

Signature

Date

**THIS SECTION TO BE COMPLETED BY STUDENT ADVISOR**

**Courses Requested for Waiver**

NO	Course Number	Course Title	Course Waiver Recommendation	
			Recommend	Do not Recommend
1			<input type="checkbox"/>	<input type="checkbox"/>
2			<input type="checkbox"/>	<input type="checkbox"/>
3			<input type="checkbox"/>	<input type="checkbox"/>
4			<input type="checkbox"/>	<input type="checkbox"/>
5			<input type="checkbox"/>	<input type="checkbox"/>

**Advisor's notes:**

I verify that I have carefully reviewed the course waiver petition and its evidence before making my recommendations.

---

**Student Advisor Name**

**Signature**

**Date**

Signed form should be emailed to the Graduate Office of Construction Science in a single PDF, attn: Liz Smith ([liz-smith@tamu.edu](mailto:liz-smith@tamu.edu)) by the student advisor.

**THIS SECTION TO BE COMPLETED BY MS PROGRAM COORDINATOR**

**Courses Requested for Waiver**

	Course Number	Course Title	Course Waiver Decision	
			Approve	Disapprove
1			<input type="checkbox"/>	<input type="checkbox"/>
2			<input type="checkbox"/>	<input type="checkbox"/>
3			<input type="checkbox"/>	<input type="checkbox"/>
4			<input type="checkbox"/>	<input type="checkbox"/>
5			<input type="checkbox"/>	<input type="checkbox"/>

**MS Program Coordinator's notes:**

I verify that I have carefully reviewed the course waiver petition and its evidence before making the final decision.

---

**MS Program Coordinator**

**Signature**

**Date**

**THIS SECTION TO BE COMPLETED BY STUDENT**

**Rationale** **for** **Course** **Waiver:**  
 Provide your rationale for each course you are requesting for a waiver and attach evidence such as your transcript, course syllabus, course description, etc.

Course Number	Course Title

**Rationale** **for** **Course** **Waiver:**  
 Provide your rationale for each course you are requesting for a waiver and attach evidence such as your transcript, course syllabus, course description, etc.

Course Number	Course Title

**THIS SECTION TO BE COMPLETED BY STUDENT**

**Rationale** **for** **Course** **Waiver:**  
 Provide your rationale for each course you are requesting for a waiver and attach evidence such as your transcript, course syllabus, course description, etc.

Course Number	Course Title

**Rationale** **for** **Course** **Waiver:**  
 Provide your rationale for each course you are requesting for a waiver and attach evidence such as your transcript, course syllabus, course description, etc.

Course Number	Course Title



**THIS SECTION TO BE COMPLETED BY STUDENT**

**Rationale**                                      **for**                                      **Course**                                      **Waiver:**  
Provide your rationale for each course you are requesting for a waiver and attach evidence such as your transcript, course syllabus, course description, etc.

<b>Course Number</b>	<b>Course Title</b>

**Rationale**                                      **for**                                      **Course**                                      **Waiver:**  
Provide your rationale for each course you are requesting for a waiver and attach evidence such as your transcript, course syllabus, course description, etc.

<b>Course Number</b>	<b>Course Title</b>

## Appendix B. Request for Graduate Assistantship in Teaching (GAT)

### Construction Science Request for Graduate Assistantship in Teaching (GAT)/Non-Teaching (GANT) (MSCM students)



Version 1.0 (Nov. 20<sup>th</sup>, 2023)

Submission deadlines for this request are **July 15 for the fall semester, November 15 for the spring semester, and March 15 for the summer semester.**

All GAT appointments starting in the Fall semester are initially made for an academic year. The appointment may be terminated if the student fails to meet satisfactory performance standards.

**Type of Assistantship:** [  ] GAT / [  ] GANT

#### MSCM Student Requested for GAT/GANT Appointment

Name: \_\_\_\_\_ UIN: \_\_\_\_\_

#### Employment Year and Semester

Year: \_\_\_\_\_ Semester: [  ] Spring / [  ] Summer / [  ] Fall

#### [For GAT] Course Number and Name to be assigned

Course Number: \_\_\_\_\_ Course Name: \_\_\_\_\_

#### [For GAT] Instructor of the Course / [For GANT] Hiring Faculty Member

Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

#### MSCM Program Coordinator

I confirm the student's good academic standing and ethical integrity (no cheating and/or ethics violation record), following consultation with the Assistant Department Head. I approve the student's GAT/GANT appointment.

Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## **Appendix C. Policy on Monitoring, Probation, and Dismissal**

### Grade Point Average (GPA) Requirements

All graduate students have two GPAs, and both must be at least 3.0 to be in good standing, to conduct any type of exam, and to graduate. Course levels included in the GPAs are 300, 400, 600, 700, and 900. Courses NOT included in the GPAs are transfer courses and 100-200 level courses. See Student Rule 10.4.3.

- Degree Plan GPA – includes only courses listed on the degree plan except transfer course work.
- Cumulative GPA (Program GPA) – includes all graduate level course work completed at TAMU.

### *Scholastic Requirements*

Unless otherwise stated, students in graduate degree programs and post-baccalaureate non-degree students (G6 classification) must maintain a 3.00 cumulative GPA (computed as specified in Student Rule 10.4.3). Degree-seeking students also must maintain a GPA of at least 3.00 on all courses listed on the degree plan. Departments and colleges may establish higher GPA requirements for their students in graduate degree programs and for post-baccalaureate nondegree students (G6 classification).

A graduate student will not receive graduate degree credit for undergraduate courses taken on a satisfactory / unsatisfactory (S/U) basis. A graduate student may not receive grades other than satisfactory (S) or unsatisfactory (U) in graduate courses bearing the numbers 681, 684, 690, 691, 692, 693, 695, 697 and 791 (except for ALEC 695, BUAD 693, AGECE 695, GEOG 695, and IBUS 692). These officially designated S/U courses may be listed on the degree plan, along with other courses approved and noted as S/U in the graduate catalog. Graduate courses not on the degree plan may be taken on an S/U basis.

Only grades of A, B, C, and S are acceptable for graduate credit. Grades of D, F, or Unsatisfactory (U) for courses on the degree plan must be absolved by repeating the courses and achieving grades of C or above or Satisfactory (S). If a course has been taken more than once and a grade of D or F was earned and then repeated for a grade of C or higher, the original grades of D or F will be excluded from the GPA calculation for the degree plan (if applicable) and cumulative GPA, but remain on the student's permanent record. A course in which the final grade is C may be repeated for a higher grade. If the second grade is higher, the original grade will be excluded from the GPA calculation for the degree plan (if applicable) and cumulative GPA but remain on the student's permanent record.

### Monitoring

Students are expected to maintain a cumulative grade point average (GPA) of at least 3.00 /4.00 with no grade less than "B" and earn grades of "Satisfactory" in core courses and dissertation research credit hours.

If a student has a semester GPA less than 2.75/4.00 or a cumulative GPA less than 3.00/4.00, a letter will be drafted by the department head to the student, with a copy to the major professor, to the Graduate School, and to the student's file, indicating the last semester was determined unsatisfactory and that they are being placed on probation.

### Probation

If a student's semester GPA falls below 2.75/4.00 or if a student's cumulative GPA falls below 3.00/4.00, the student will be placed on academic probation. The student will have two semesters to raise their cumulative GPA to the required level and return to good standing. If they do not, they will not be able to register for classes

the subsequent semester and will be dismissed from the program. Eligibility for an assistantship while on probation will be left to the School/Department Head's discretion.

### Dismissal

A student will be dismissed from the program if they remain on probation for two consecutive semesters without improvement. In other words, if a student's semester GPA is below 2.50/4.00 or if a student's cumulative GPA falls below 2.75/4.00, the student will be immediately dismissed from the program. This policy is independent of any assistantship the student may hold.

### Appendix D. Sample Elective Courses

Prefix and Number	Prescribed Elective Course Title	SCH
<b>AT LEAST 18 SCH NOT PREVIOUSLY TAKEN (WITH CHAIR APPROVAL)</b>		
<b>Courses Offered by Construction Science:</b>		
COSC 606	Electrical and Mechanical Construction	3
COSC 608	Structural Principles and Practice	3
COSC 620	Construction Company Operations	3
COSC 621	Advanced Project Management	3
COSC 622	Construction Economics	3
COSC 624	Construction Accounting and Financial management	3
COSC 628	Law and Risk Management	3
COSC 631	Advanced Construction Productivity and Lean	3
COSC 642	Construction Info Technology	3
COSC 644	Advanced Construction Systems	3
COSC 648	Graduate Capstone	3
COSC 650	Construction Visualization	3
COSC 663	Sustainable Construction	3
COSC 670	Facility Asset Management	3
COSC 685	Directed Studies (not more than 6 SCH)	var.
COSC 689	Special Topics (not more than 6 SCH)	3
COSC 689-xxx	Data Science for the Built Environment	3
COSC 689-xxx	Advanced Construction Safety and Health Management	3
COSC 689-xxx	Life Cycle Assessment in Building Construction	3
COSC 689-xxx	CII Best Practices	3
<b>Courses Offered by Other Departments:</b>		
ACCT 640	Accounting	3
ARCH 620	Building Performance Measurement	3
ARCH 622	Sustainable Building Design Technology	3
ARCH 675	Health Design and Research	3
CSCE 625	Artificial Intelligence	3
CSCE 629	Analysis of Algorithms	3
CSCE 633	Machine Learning	3
CSCE 636	Deep Learning	3
CSCE 676	Data Mining and Analysis	3
CVEN 624	Infrastructure Engineering and Management	3
CVEN 638	Computer Integrated Construction Engineering Systems	3
CVEN 639	Methods Improvement for Construction Engineers	3
CVEN 640	Construction Engineering Systems	3
CVEN 641	Project Development: Methods and Models	3
CVEN 644	Project Risk Management	3
CVEN 654	Strategic Construction and Engineering Management	3
CVEN 668	Advanced EPC Project Development	3
CVEN 710	Civil Engineering Project Finance	3
CVEN 717	Engineering Project Control	3
FINC 635	Finance	3

Prefix and Number	Prescribed Elective Course Title	SCH
LDEV 663	Introduction to Project Management	3
LDEV 672	Public-Private Project Funding	3
MATH 606	Theory of Probability I	3
MATH 609	Numerical Analysis	3
MATH 619	Applied Probability	3
MATH 645	A Survey of Math Problems	3
MGMT 655	Management	3
MKTG 621	Marketing	3
PLAN 612	Transportation in City Planning	3
PLAN 616	Analyzing Risk/Hazard and Public Policy	3
PLAN 625	Geographic Information Systems in Landscape & Urban Planning	3
PLAN 626	Advanced GIS in Landscape Architecture & Urban Planning	3
PLAN 647	Disaster Recovery and Hazard Mitigation	3
PLAN 649	Organizational and Community Response to Crises and Disasters	3
PLAN 650	Disaster Response Planning	3
PLAN 669	Urban Infrastructure Planning	3
PLAN 674	Transportation System Analysis	3
PLAN 676	Transportation Investment Decisions	3
STAT 610	Theory of Statistics - Distribution Theory	3
STAT 614	Probability for Statistics	3
STAT 624	Database and Computational Tools Used in Big Data	3
STAT 639	Data Mining and Analysis	3
STAT 651	Statistics in Research I	3
STAT 652	Statistics in Research II	3
VIZ 615	Computer Animation	3
VIZ 672	Computer Graphics	3
VIZ 673	Robotics Programming	3
VIZ 676	Data Visualization	3
VIZ 677	Virtual Reality	3