



TUSKEGEE UNIVERSITY

Department of Construction Science

ROBERT R. TAYLOR SCHOOL OF ARCHITECTURE AND CONSTRUCTION SCIENCE

COOPERATIVE EDUCATION (CO-OP) MANUAL

Managing the social, technological, financial and environmental challenges facing the construction industry today by producing professionals who are managers of people, finance, time and physical resources.

TSACS COOPERATIVE CONSTRUCTION SCIENCE and MANAGEMENT (CSM) EDUCATION PROGRAM'S MISSION

The Construction Science and Management (CSM) program at Tuskegee University is one of the oldest construction baccalaureate programs in the country. Its roots can be traced back to the trade orientation that Tuskegee University had in the early twentieth century. Its mission at one time was to provide skilled craftsmen who were capable of building sound structures and who would ultimately strive to become general contractors.

However, the present mission is much broader than the original one. The skills that are required of its graduates are more comprehensive. Construction graduates are required to appreciate the work of the craftsman and know the standards of quality and safety that are required of all trades involved in the construction process. But the construction professional is also a manager of people, money, time and physical resources.

Construction Science and Management undergraduate students can gain significant technical experience in the construction industry before graduation through the Construction Science and Management Cooperative Education Program, or CSM Co-op; an experiential learning program. Co-op students must complete at least one semester of full-time work (Students may work only one regular semester per academic year. Students are permitted however, to pair a summer term with a fall or spring semester) with the same employer and may be eligible to a maximum of 9 academic credit hours depending on available general electives.

By integrating multiple semesters of construction science and management work experience with on-campus study, co-op students enhance their classroom knowledge through practical application of theories to real-world issues. Co-op students explore specific interests within their academic discipline and refine their post-graduation goals. At the same time, co-op allows students to earn a competitive salary, which can be used to help finance their education.

Returning to the same employer for subsequent experiences gives students access to more challenging and in-depth projects while building a long-term relationship with the employer. It also allows co-op employers to evaluate potential permanent hires over an extended period of time, provides a continual pipeline of bright young people, and a cost-effective method for completing construction management tasks.

Students will experience an active working relationship with local industry and develop a global perspective through cooperative efforts and exchange programs with national and international universities and colleges in the framework of a culture of ethics, which are vital in the development of successful construction professionals and provides distinct characteristics for our graduates' pursuit of career development and professional opportunities.

CSM GOALS

1. The Department of Construction Science will develop a cooperative agreement with industry firms and domestic and international universities serving our Construction Science and Management (CSM) graduates, and maintain a high quality Bachelor of Science program in Construction Science and Management that will enable graduates to achieve their maximum potential in the building construction field. The department will broaden our graduates' horizons through local community based learning service projects and through international study abroad classes/programs.
2. The department will focus its resources on the continuing development of a construction science and management program of the highest quality in keeping with the needs of our dynamic industry.
3. The department will offer degree program that has relevance to the needs of the community in areas such as life-long learning, ethics, and professional development.
4. The department will maintain an active presence through its partnerships in the southern Alabama community and surrounding regions.
5. The Department will recruit and retain exceptional faculty and staff to ensure quality academic program.

TSACS CSM CO-OP OBJECTIVES

The mission of the TSACS Cooperative Education Program is to meet the challenges of the future by educating the student, supporting intellectual contributions by faculty, and assisting the construction industry. The TSACS Co-Op Program's primary purpose is to prepare the construction student with leadership responsibilities in a technologically oriented, diverse, dynamic and global construction environment.

Purpose: In an effort to aid the student in developing career awareness, the Department of Construction Science at Tuskegee University is placing increased emphasis on career planning. An important component of this emphasis is a co-op program that provides the student with opportunities to obtain actual work experience while testing the concept of the student's chosen profession, thus assisting the student to be more certain of career objectives.

In addition, a viable co-op program reinforces the student's learning process. Understanding of the relationship between a course's content and the student's chosen profession enhances learning capabilities, resulting in improved academic skills.

TSACS Co-op program also offers significant benefits to participating firms. It provides an excellent opportunity for the employer to evaluate a potential employee in the work environment. A well-designed co-op program also brings to the company temporary employees who are capable of making significant and productive contributions during their tenure.

The training of a young man/woman for a successful career in the construction industry requires the combined efforts of Tuskegee University and the construction business community in which the student will ultimately serve. Companies participating in the co-op program support this philosophy by bridging the gap between the student's educational training and the student's practical experiences.

General Description: Several construction firms throughout the U.S. have agreed to provide co-op opportunities to CSM students in order to provide them with construction management-related work experience. Each co-op agreement lasts one semester and maybe combined with a summer internship during which time the student (the Co-op) is expected to work with the employer approximately forty (40) hours per week. The employer assigns a specific Co-op Supervisor to mentor the student. The Co-op is required to submit bi-weekly reports and a final summary report about their work experiences. The coop earns a maximum of nine credit hours after they successfully complete the co-op agreement. A member of the CSM faculty (who is usually the *TSACS Industry Relations Coordinator*) supervises the cooperative education program and will assign the final grade.

Each CSM student is expected to complete at least one (1) co-op agreement as a prerequisite to earning a Construction Science and Management degree. Each student may indicate their personal preference regarding the nature of the co-op position and the co-op company. The TSACS Industry Relations Coordinator will assist students in finding a co-op opportunity, but ultimately it is the student's responsibility to secure a co-op opportunity.

Program Objectives: The primary objective of the co-op program is to provide CSM students with an opportunity to observe and/or participate in all aspects of construction management that are typically encountered in the construction work place. The instructional intent of the co-op is, first, for the co-op student to develop an overall understanding of the different managerial processes regarding construction contract administration at both the construction site and at the home office. The intent is to introduce the co-op student to the various administrative requirements for each and how such processes vary. Second, the co-op will be introduced to project control systems for project planning and budgeting. Finally, the co-op should attempt to integrate and utilize classroom gained knowledge and apply same to situations presented via the work experience.

The TSACS Cooperative Education Program is governed by the established policies and guidelines of Tuskegee University's Career Development and Placement Center.

Expected Learning Outcomes of the CSM Cooperative Education (Co-op) Program

The CSM Co-op Program Student Learning Outcomes are as follows:

1. Academic and Technical Competencies

As a result of participation in the program, the student should be able to identify different leadership styles and be able to define and demonstrate a broader understanding of the different construction operation processes and the processes of contract administration.

2. Professional Development Competencies

As a result of participation in the program, the student should be able to assess and evaluate personal managerial strengths and weaknesses as well as be able to evaluate career alternatives.

3. Personal Development Competencies

Finally, as a result of participation in the CSM Cooperative Education Program, the student should be able to demonstrate succinct written and oral communication skills. Additionally, he/she should be able to demonstrate analytical decision-making skills.

Students complete a self-assessment at the beginning and end of each co-op work term in order to measure achieved outcomes and enhance the reflective learning process. CSM co-op students complete a student work performance evaluation for each term to monitor progress and provide construction feedback to the student.

CSM Cooperative Education (Co-op) Program Employer Expectations

The CSM Co-op employer must also meet certain program expectations.

The employer is expected to:

1. Provide the student with at least one semester and one summer term.
2. Educate the students by having them perform work relevant to their academic discipline.
3. Provide direct supervision by a project/construction manager.
4. Provide a mentor. This maybe a direct supervisor or other experienced employee.
5. Review the student's work and complete a performance evaluation for each semester of work.
6. Coordinate networking opportunities by including students in employer events.
7. Maintain communication with the TSACS Industry Relations Office regarding recruitment and performance.

Scheduling Co-op Work Terms

Work terms are determined between the employer and student, typically based on job requirements of the organization as well as the academic needs and work performance of the student. Co-op work terms can either be alternating semesters or one long semester back-to-back with a summer semester (i.e. Spring/Summer or Summer/Fall). However, scheduling must include at least one long semester (i.e., fall or spring), and cannot be two long semesters back-to-back (i.e., Fall through Spring).

Procedures and Responsibilities

For the TSACS CSM Industry Relations Coordinator:

1. Assist the student in selecting the co-op employer/supervisor to ensure that the co-op opportunity is an appropriate and desired work experience.

2. Advise the Co-op of the program expectations, and requirements such as creating the co-op goal assessment criteria.
3. Monitor the progress of the student by reviewing their weekly timesheets and work experience reports.
4. Respond to work related problems or student concerns.
5. Assign a final grade based on the TSACS Industry Relations Coordinator's and Co-op Supervisor's evaluation and other factors.

For the Co-op Supervisor:

1. A specific construction manager, rather than the construction firm, is responsible for the overall co-op experience. This person is designated as the student's Co-op Supervisor; however, this does not preclude a student co-op from working with other construction managers where and when necessary to expand the Co-op's work related experience.
2. The Co-op Supervisor should be available for consultation, with both the TSACS Industry Relations Coordinator and the Co-op, regarding the co-op placement process, ongoing progress, and final evaluation.
3. The Co-op Supervisor must sign the co-op's work experience report before it is submitted to the TSACS Industry Relations Coordinator. Each Co-op student is expected to work approximately forty hours during the co-op agreement period. The intern must understand, however, that only a maximum of nine (9) semester credit hours may be credited towards the student's baccalaureate degree.
4. Provide training and resources to needed to complete the assignment(s).
45. The Co-op Supervisor should strive to provide the Co-op with as many different kinds of experiences and responsibilities in construction management as the placement will allow. These opportunities, for example, might include (but are not limited to) observing or perhaps performing (under supervision) field supervisory tasks, drafting letters to owner, architect, subcontractor, or vendor, negotiating contracts, and drafting contract documents.
5. During the co-op, the Co-op Supervisor should contact the TSACS Industry Relations Coordinator should any problems arise with the Co-op's work performance.
6. At the completion of the co-op agreement, the Co-op Supervisor will evaluate the Co-op student's work. The TSACS Industry Relations Coordinator will provide an evaluation form. Brief comments on the positive and negative aspects of the student co-op's performance are encouraged. The evaluation should be submitted during the last week (or immediately after completion) of the co-op assignment.

For the Co-op Student:

1. Complete all academic requirements for the co-op program.
2. At the beginning of the semester, the TSACS Industry Relations Coordinator will provide each student with information about the available co-op/internship opportunities. The student may indicate a preference for a particular category and a particular construction manager and/or firm or company with whom he or she would like to work. Students can even arrange their own co-op on an ad hoc basis (especially if an opportunity for a future employment agreement exists), but final approval rights are still reserved by the TSACS Industry Relations Coordinator.
2. The actual work experience schedule shall be negotiated between the Co-op Supervisor, the Co-op/Intern and the TSACS Industry Relations Coordinator. All issues relative to work schedules, rate of compensation, school vacations, and holidays shall be resolved between the Co-op student and Co-op Supervisor.
3. The co-op student must register for the Co-op course and pay the applicable tuition and/or fees for the academic term during which the Co-op work is being performed.
4. The Co-op will submit, via email, a typed work experience report' to the TSACS Industry Relations Coordinator that has been signed by the Co-op Supervisor. A standard form will be provided for this purpose.

The report should list the nature of the previous period's work experiences and include at least one "insightful" observation related to the nature of "leadership and/or management styles of construction managers". These "insights" will form a partial basis for the required final summary report. The TSACS Industry Relations Coordinator must receive the report by 4:00pm on the Tuesday (or at agreed time) following each period being reported. The purpose of the report is to ensure that the Co-op is participating in meaningful and varied management-related work experiences.

5. The last week of the semester the co-op will submit to the TSACS Industry Relations Coordinator a summary report about the Co-op's work experiences focused on the "lessons learned". The TSACS Industry Relations Coordinator will provide the report content and format requirements separately to the co-op.

In addition to "satisfactory" performance on the job (as evaluated by the Co-op Supervisor), the Co-op will be expected to produce a "thoughtful, insightful, and comprehensive" summary report that addresses both the "lessons learned" about specific management methods and processes and observations/conclusions about "leadership and management styles of construction managers".

NOTE: Co-op credit will not be granted retroactively; the student must have the co-op approved in advance.

The Co-op Process

Once you've decided to pursue a co-op experience, the process for making it happen is fairly simple. Simply follow the steps outlined here.

Student Application Process

The first steps to becoming associated with the TSACS Co-op Program are as follows:

- Be currently enrolled at Tuskegee University.
- Register with the Career Development and Placement Services office.

The Co-op Program holds an open application period at the beginning of each Fall and Spring semester. Students typically apply a semester or two before they want to actually start working.

- Fall semester applicants may begin co-op work in the spring or summer.
- Spring applicants may begin working in the summer or fall.

Before applying, students must meet the following academic requirements:

- Be an undergraduate architecture or construction science and management student,
- Have at least 30 hours of basic sequence course work, including:
 - 6 hours of Introduction to Construction (i.e., CSM 101& CSM 102),
 - 3 hours of Construction Safety (i.e., CSM 352), and
 - 6 hours of College Algebra & Trig. (i.e., MATH 107 & MATH 108),
- Completed an introductory course in construction,
- Have received OSHA 10-Hour or 30-Hour certification,
- Have a minimum 2.5 overall GPA*,
- For transfer students and first-year students, have completed one full semester of construction science and management at Tuskegee University, and
- Have at least 12 hours of degree coursework left after the final co-op term.

Students must complete the following steps by the stated co-op application deadline:

1. Register with the Tuskegee University's Career Development and Placement Services Office and the TSACS Industry Relations.
2. Submit a copy of resume to the TSACS Industry Relations Office and Tuskegee University's Career Development and Placement Services Office.
3. Attend a Co-op Information Session.
4. Complete the application.

The Co-op Job Search

Once a student has been approved to the program, the co-op job search begins.

The TSACS Industry Relations Office along with Tuskegee University's Career Development and Placement Services Office (CDPS) coordinates student recruitment for available co-op positions, in addition to summer internships and permanent hires. The job search services include an online job board, on-campus interviewing, career fairs, and resume database search.

* Exceptions may be granted on a case-by-case basis. Please contact the TSACS Construction Industry Coordinator or your academic advisor for additional information.

The TSACS Industry Relations Office also assists in the recruitment process by announcing co-op job postings and promoting co-op employer activities to student applicants as well as connecting employers with potential co-op candidates through resume referrals. All policies and guidelines established by Tuskegee University's Career Development and Placement Services Office (CDPS) are adhered to.

Accepting a Co-op Offer: Housing and Other Issues

TSACS and Career Development & Placement Services Staff are available to assist students with job offer questions and concerns. When accepting a co-op offer, students are advised to meet with an academic advisor to discuss integrating the co-op experience with remaining degree requirements and to strongly consider interest in potential job placement as well as housing and transportation needs.

While co-op student applicants are not obligated to accept a co-op offer, students must report an accepted co-op position to the TSACS Industry Relations Office as soon as possible in order to enroll in the co-op course and prepare for leaving campus to work.

Before Beginning a Co-op

Co-op students must complete the following program requirements before leaving each co-op work term;

1. Complete a pre-work orientation and pre-assessment form. The pre-work orientation is a mandatory session to review Co-op Program requirements and discuss transitioning to the professional workplace. The pre-assessment form allows students to evaluate their current knowledge and abilities, reflect on their expectations of the co-op experience, and set specific goals to achieve during the work term.
2. Register and pay for the co-op course(s) and continuous registration fee. Only students who have applied to the Co-op Program and have accepted an offer are eligible to register for the following co-op courses:
 - ***CSMT 500 Construction Management Co-op 1 (3 Credits)***
 - ***CSMT 501 Construction Management Co-op 2 (3 Credits)***
 - ***CSMT 502 Construction Management Co-op 3 (3 Credits)***

It is the student's responsibility to inform Academic Records, the Financial Aid Office, Housing Office or other university offices as needed that you will be accepting a co-op position.

While on a Co-op Work Term

During the co-op work term, students are required to complete a Work Contact Information Form and Mid-term Work Evaluation. These forms are available in the Co-op Blackboard site and deadlines are stated in the course syllabus (a variation may exist). While students are at work, TSACS faculty and staff is available to assist with academic and other on-campus issues, such as registration for the upcoming semester, and will maintain open communication between students and employers to monitor the co-op experience and address any issues.

The Co-op Course: Grading and Academic Credit

At the conclusion of each work term, students must submit a Work Term Assignment Evaluation report. This includes a technical report, employer evaluation, and post-assessment form. TSACS Co-op faculty advisors review these and assign course grades. Upon successful completion of the program, students receive one hour of letter-grade credit per each work term. Co-op course credit may be counted as an elective; students must speak with an academic advisor to determine how co-op course credit can be applied toward the degree.

Tuskegee University Career Development and Placement Services (CDPS)

Tompkins Hall, 4th Floor, Rm. 404
Tuskegee, AL 36088

Chante'l Boyd, Office Assistant

Phone: (334) 727-8294

Email: Cboyd@tuskegee.edu

Rasheeda Tucker, Administrative Assistant

Phone: (334)727-8146

Email: rtucker@tuskegee.edu

Fax: (334) 727-8258

TSACS Industry Relations Co-op Program

Charner Rodgers, Ph.D., Industry Relations Coordinator

Joel Wao, Ph.D., Department Head

Construction Science, Willcox C Suite 115

Phone: (334) 724-4749 | (334) 727-8330

Fax: (334) 724-4198

Email: croddgers@tuskegee.edu / jwao@tuskegee.edu

TO THE EMPLOYERS: Please know that Tuskegee University's Construction Science and Management (CSM) program in the Department of Construction Science sincerely appreciates your interest and support of the Robert R. Taylor School of Architecture and Construction Science (TSACS) Co-op Program.

The TSACS Cooperative Education Program is governed by the established policies and guidelines of Tuskegee University's Career Development and Placement Center.

TUSKEGEE UNIVERSITY

ROBERT R. TAYLOR SCHOOL OF ARCHITECTURE AND CONSTRUCTION SCIENCE CONSTRUCTION SCIENCE CO-OP AGREEMENT

Co-op/Intern Student's Name: _____ Major: _____

Student's Address _____
(Street/P.O. Box) (City) (State) (Zip Code)

Student's Phone Number _____ E-mail _____

Student's I.D. Number _____

Employer _____ Phone Number _____

Employer's Address _____
(Street/P.O. Box) (City) (State) (Zip Code)

Supervisor's Name _____ Title _____

Supervisor's Contact Information:

Phone _____

Fax _____

E-mail _____

Co-op/Internship Starting Date _____ Ending Date _____

Student's Rate of Compensation _____ Hours to be worked per week _____

During the co-op/internship period the COMPANY agrees to employ the co-op/intern in the task areas checked below:

- Safety
- Estimating
- Project Planning & Scheduling
- Project Administration & Management (RFI's, shop drawings, change orders, contract management, etc.)
- Marketing, Proposals, & Sales
- Craft Training or Skills (Working on a crew with a qualified craft supervisor)
- Design
- Procurement & Expediting
- Field Layouts & Surveying
- Cost Controls
- Risk Management
- Quality Assurance and Control
- Other Description: _____

RESPONSIBILITIES OF THE STUDENT

1. The student is required to complete all academic requirements of the co-op program.
2. The student's rate of compensation is to be negotiated between the Employer and the TSACS Industry Relations Coordinator.
3. A grade will be assigned that is contingent upon a "satisfactory" evaluation by the Supervisor, as well as completion of all other requirements specified by the course syllabus and/or the Co-op Manual.
4. Each Co-op student will maintain regular contact with the TSACS Industry Relations Coordinator. The co-op student is also required to present an initial list of their personal objectives for the co-op assignment (developed in coordination with the co-op Supervisor) and submit a final summary report on their work experience.
5. The student is subject to the jurisdiction of all rules, regulations, and codes of conduct affecting students at Tuskegee University, as well as those that the employer may require.
6. The student must maintain confidentiality with regard to sensitive business information gained in the work environment.

RESPONSIBILITIES OF THE TSACS INDUSTRY RELATIONS COORDINATOR:

1. Provide the student and Supervisor with a pre-internship orientation, maintain regular interactions with both parties to assure that the learning objectives are being achieved, and conduct the final evaluation of the internship based on input from the co-op/intern supervisor and reports submitted by the Co-op/Intern.
2. Provide the participating employer/supervisor with appropriate instruments for evaluating the student.
3. Assist the student in selecting the co-op employer/supervisor to ensure that the co-op opportunity is an appropriate and desired work experience. Final report must be submitted on the co-op/internship experience.

RESPONSIBILITIES OF THE PARTICIPATING EMPLOYER AND SUPERVISOR

1. The Employer should assign a specific Supervisor to work directly with the student to help achieve the educational objectives of the co-op/internship by assigning appropriate work duties.
2. The Supervisor and the student will create a list of specific objectives and assessment criteria for the co-op/internship that will form the basis for evaluating "satisfactory completion" of the co-op/internship.
3. Provide the student with an orientation to the work-site duties, hours, and employer/supervisor expectations.
4. Schedule regular meetings with the student and provide ongoing feedback about the student's performance.
5. Provide a safe and secure workplace at which the student has the opportunity to meet his/her educational objectives.
6. At the completion of the co-op agreement, the Supervisor will evaluate the student's work performance. The Supervisor will complete the "Confidential Evaluation Form" (provided by the TSACS Industry Relations Coordinator) and will provide brief comments on the positive and negative aspects of the Student's performance. The evaluation form should be submitted within fourteen (14) days of the completion of the co-op/internship.

*This agreement is subject to any specified educational objectives, duties, learning outcomes, and evaluation methods that may accompany this agreement or are included in the Co-op/ Internship Manual. ***ONCE ALL OF THE APPROVED SIGNATURES ARE COMPLETED, YOU MUST REGISTER FOR THE CLASS IN ORDER TO GET CREDIT!****

(Student) _____ (Date)

(Supervisor/Employer) _____ (Date)

(Academic Advisor) _____ (Date)

(Department Head) _____ (Date)

(Career Development and Placement Services) _____ (Date)

(TSACS Industry Relations Coordinator) _____ (Date)

22. Displays good attitude and work ethic as well as drive and initiative.

23. Overall performance

Comments: _____

Does it appear that the student's academic program is oriented to the particular needs of your organization? Yes No

What changes would you like to see implemented in the curriculum to better prepare future students for your organization?

Person Completing the form: _____

Date: _____

Please mail original to: Tuskegee University – Construction Science and Management (CSM)
TSACS Cooperative Education (Co-Op)/Internship Program, Willcox C, Suite 115, Tuskegee, AL 36088
TEL. 334.724.4749 FAX: 334.724.4198 E-mail: crodgers@tuskegee.edu (Charner Rodgers, Ph.D.)