

# Program Revision Proposal: Changes to an Existing Program Form 3A

Version 2016-10-13

SUNY approval and SED registration are required for many changes to registered programs. To request a change to a registered program leading to an undergraduate degree, a graduate degree, or a certificate that does not involve the creation of a new program,<sup>1</sup> a Chief Executive or Chief Academic Officer must submit **a signed cover letter and this completed form** to the SUNY Provost at *program.review(@suny.edu*.

Section 1. General	Information									
a)	Institution's 6-digit SED Code:	240500								
Institutional Information	Institution's Name:	SUNY COL ENV SCI & FORESTRY								
linoimation	Address:	1 Forestry Dr., Syracuse, NY 13210								
b) Program	List each campus where the entire program will be offered (with each institutional or branch campus 6-digit <u>SED Code)</u> : 240500									
Locations	List the name and address of <u>off-campus locations</u> (i.e., <u>extension sites or extension centers</u> ) where courses will offered, <b>or check here [ X ] if not applicable</b> :									
c)	Program Title:	CONSTRUCTION MANAGEMENT								
Registered Program to be	SED Program Code	28752								
Changed	<u>Award</u> (s) (e.g., A.A., B.S.):	B.S.								
	Number of Required Credits:	Minimum [128] If tracks or options, largest minimum [ ]								
	HEGIS Code:	0599.00								
	<u>CIP 2010 Code</u> :	52.2001 (https://nces.ed.gov/ipeds/cipcode/cipdetail.aspx?y=55&cip=52.2001)								
	Effective Date of Change: Fall 2024									
	Effective Date of Completion <sup>2</sup>	Spring 2028								
d) Campus Contact	Name and title: Erin Tochelli, Associate Director of Academic Administration Telephone and email: 315-470-6943, ertochel@esf.edu									
e) Chief Executive or Chief Academic Officer Approval	<ul> <li>r Signature affirms that the proposal has met all applicable campus administrative and shared governance procedures for consultation, and the institution's commitment to support the proposed program. <i>E-signatures are acceptable.</i></li> <li>Name and title: Samuel B. Mukasa, Executive Vice President and Provost Signature and date:</li> </ul>									
	If the program will be registered jointly <sup>3</sup> with one or more other institutions, provide the following information for <u>each</u> institution:									
	Partner institution's name and 6-	digit <u>SED Code</u> :								
	Name, title, and signature of partner institution's CEO (or <b>append</b> a signed letter indicating approval of this proposal):									

### Section 2. Program Information

<sup>&</sup>lt;sup>1</sup> To propose changes that would create a new program, Form 3B, <u>Creating a New Program from Existing Program(s)</u>, is required.

<sup>&</sup>lt;sup>2</sup> If the current program(s) must remain registered until enrolled students have graduated, the anticipated effective date by which continuing students will have completed the current version of the program(s).

<sup>&</sup>lt;sup>3</sup> If the partner institution is non-degree-granting, see SED's <u>CEO Memo 94-04</u>.

### Section 2.1. Changes in Program Content

[] No changes in program content. Proceed to Section 2.2.

### a) Check all that apply. Describe each proposed change and why it is proposed.

- [X] Cumulative change from SED's last approval of the registered program of one-third or more of the minimum credits required for the award (e.g., 20 credits for associate degree programs, 40 credits for bachelor's degree programs)
- [] Changes in a program's focus or design
- [] Adding or eliminating one or more options, concentrations or tracks
- [] Eliminating a requirement for program completion (such as an internship, clinical placement, cooperative education, or other work or field-based experience). Adding such requirements must remain in compliance with SUNY credit cap limits.
- [] Altering the liberal arts and science content in a way that changes the degree classification of an undergraduate program, as defined in <u>Section 3.47(c)(1-4) of Regents Rules</u>

We have made minor incremental changes to the Construction Management program over the past 20 years. Below is a summary of the proposed changes to relative to the current Construction Management (CM) curriculum:

- Replacing APM 105 Survey of Calculus and Its Applications I (4 Credit Hours) with APM 103 Applied Algebra & Trigonometry (3 Credit Hours). Based on the actual knowledge needs of CM profession, the low utility of calculus in CM course learning, and strong knowledge in algebra and trigonometric functions, we propose to use APM 103 Applied Algebra & Trigonometry (3 Credit Hours) to replace APM 105 to strengthen algebra and trigonometric skills for CM students.
- 2. Replacing PHY 211 General Physics I (3 Credit Hours) (together with PHY 221 General Physics I Laboratory (1 Credit Hour)) by FOR 110 Environmental Physics (3 Credit Hours). We found even after students had taken PHY 211 and PHY 221, they were not well prepared for taking CME 226, and given that ESF created its own Physics class containing more topics needed for CME 226, it was determined to be a better fit within the CM program.
- 3. Replacing ERE 371 Surveying for Engineers (3 Credit Hours) with CME 371 Surveying for Construction Managers (1 Credit Hour). ERE 371 is set up mainly for engineering students which makes its contents, coverage, and depth unsuitable for CM students (more than CM needs). The feedback from CM students showed that they had struggled in the class. In our 2023 Industry Advisory Board (IAB) meeting, the IAB suggested that CM students (future Construction Managers) may not need very deep knowledge in surveying based on the current business models in construction industry in the U.S. We propose to create our new CM-specific surveying class CME 371 Surveying for Construction Managers with fewer credit hours (1 credit hour). We will customize the new surveying class to better meet the needs of CM students in their future career development.
- 4. Changing the title and course description of CME 454 Construction Project Management (3 Credit Hours). The reality is that CME 454 is used as the capstone course for the CM program, the course title and description do not clearly articulate this and cause confusion to CM Major and Minor students. Students expect it to be a regular lecture-based class. New course will be CME 454 Capstone, with course description as follows: "Three hours of discussion/project instruction and/or lab-based implementation for a Capstone project per week. It will utilize a comprehensive real-world project opportunity to allow the students to experience the main stages and components of construction project. The course mainly focuses on organizational structure, construction estimating, bidding process and documents, construction scheduling, value engineering, and sustainability. Spring. Prerequisites: CME 343, CME 453, senior standing, or permission of instructor. Note: Credit will not be granted for both CME 454 and CME 654."
- 5. Adding CME 440 Capstone Planning (1 Credit Hour). based on the current teaching model for the Capstone class at ESF and the new business trend of Integrated Project Management (IPM) in the construction industry. Currently, the CM Capstone class CME 454 Construction Project Management (3 Credit Hours) is offered by collaborating with Environmental and Interior Design (EID) program at Syracuse University (SU). Through the collaboration, both EID students and CM students are allowed to be involved in real-world projects from the local Syracuse community. The EID students at SU create their designs and drawings in their Design Capstone class during Fall semester. Based on these design schemes from SU students, CM students at ESF develop construction management products for the owners, mainly including estimating, scheduling, value engineering, and sustainability schemes. With the current teaching

method at ESF (CME 454 is offered in Spring of Senior year), SU students are essentially playing a voluntary role in the collaboration (SU students take their Design Capstone in Fall semester, rather than Spring semester). As a result, the collaboration has been fine, but we think it can be better by adding a mandatory overlapping period for EID and CM students (Based on the students' feedback and the observations from both SU and ESF instructors, some SU students are not very responsive because the collaboration is just voluntary for them). Furthermore, CM students missed the opportunity to be involved in the project from the initiation stage and therefore, they are less familiar with the project compared to SU students. Meanwhile, as a new business model IPM which encourages the participation of various stakeholders in the project initiation stage for project management has been increasingly used in the construction industry. Combining all these considerations, we propose to add a 1-credit Capstone Planning class which will occur concurrently with the SU Design Capstone class, allowing a more meaningful collaboration and construction management process. In summary, the addition of this Capstone Planning class has three benefits: 1) ESF CM students and SU EID students can foster better partnerships. 2) ESF CM students can get more familiar with the project with earlier participation. 3) ESF CM students can better understand IPM model and Design Build concept, and apply relevant project management skills.

- 6. Adding CME 456 Advanced Skills for Construction Management (3 Credit Hours). Given the uniqueness of CM curriculum at ESF (originating out of Wood Products Engineering), we do not have many classes offering soft skills, such as negotiation, conflict resolution, human resources management, and so on. However, these skills are highly needed in construction business. Unfortunately, our students are often weak in these areas. We propose to incorporate these topics within this new class, along with topics related to new modern technologies used by CM professionals, such as drones and Virtual Reality.
- Adding one independent learning class for professional development which can be satisfied by either CME 403 7. Construction Management Internship II (1 Credit Hour) or CME 490 CAC Exam Preparation (1 Credit Hour) or CME 488 Professional Construction Project Management Presentation Seminar (1 Credit Hour). CM is a practice-oriented program for which internship experiences and professional development activities can help students reinforce the classroom knowledge they have already learned and prepare students for better understanding the new classroom knowledge in their subsequent college education. Currently, CM curriculum only requires 1 Credit Hour in internship for professional development (CME 303 Construction Management Internship). Based on the feedback from students and the discussions among program colleagues, we propose to require more Credit Hours for professional development. We propose to add the second internship optional class having 1 Credit Hour in the Fall semester of Senior year. In total, in the new curriculum, students can have two internship classes including CME 303 Construction Management Internship (1 Credit Hour, Required) in the Fall of Junior year and CME 403 Construction Management Internship II (1 Credit Hour, Optional) in the Fall of Senior year. To enable more flexibility, the class can be fulfilled by taking part in competitions hosted by national organizations, such as Associated School of Construction (ASC), Department of Energy (DOE) with a class CME 488 Professional Construction Project Management Presentation Seminar (1 Credit Hour) or a professional exam, such as Certified Associate Constructor (CAC) exam with a class CME 490 CAC Exam Preparation (1 Credit Hour). The adding of this new professional development and internship class will allow CM students to gain more educational and professional benefits from internship experiences and professional activities
- 8. Changing the required prerequisites for CME 226 Statics and Mechanics of Materials (4 Credit Hours) from PHY 211 General Physics I (3 Credit Hours) (together with PHY 221 General Physics I Laboratory (1 Credit Hour)) and APM 105 Survey of Calculus and Its Applications I (4 Credit Hours) to FOR 110 Environmental Physics (3 Credit Hours) and APM 103 Applied Algebra & Trigonometry (3 Credit Hours). Rational based on matching new math and physics requirements of the program.
- 9. Adding prerequisite of APM 391 Introduction to Probability and Statistics (3 Credit Hours) to CME 335 Cost Engineering (3 Credit Hours). Currently, the prerequisite for CME 335 is "upper division standing". In CME 335, risk management and uncertainty analysis are important components, needing basic knowledge in statistics and probability theories. However, the current prerequisite cannot guarantee that the students taking CME 335 have the knowledge required by the class because some transfer students are in upper division but have not taken statistics related classes. To reduce students' challenge in understanding risk management and uncertainty analysis components when taking CME 335, we propose to add APM 391 Introduction to Probability and Statistics (3 Credit Hours) which offers the knowledge and skills in statistics and probability theories as a new additional prerequisite for CME335.
- 10. Adding prerequisite of APM 391 Introduction to Probability and Statistics (3 Credit Hours) to CME 453 Construct Plan/Scheduling (3 Credit Hours). Currently, CME 453 only has the prerequisite of "CME 343 or permission of instructor". However, CME 453 covers an important component of the program evaluation and review technique (PERT) which needs basic knowledge in statistics that is not provided with current prerequisite. To meet the teaching

and learning needs of this component, we propose to add APM 391 Introduction to Probability and Statistics (3 Credit Hours) for CME 453 as an additional prerequisite.

- 11. Deleting CME 304 Environmental Performance Measures for Buildings (3 Credit Hours). In the current curriculum, CME 304 is an either/or class with CME 215. We propose to delete CME 304, because CM program is under the accreditation with American Council for Construction Education (ACCE) which would require the two classes to teach similar contents. CME 215 class can meet the needs of CM students in satisfying their educational goals in sustainable construction development.
- 12. Changing the sequence of course offering for CME 342 Light Construction, CME 306 Engineering Materials for Sustainable Construction, FOR 205 Principles of Accounting, EWP 220 Public Presentation Skills, CME 331 Construction Safety, CME 215 Sustainable Construction, APM391 Intro to Probability & Statistics, CME255 Plan Interpretation & Quantity Takeoff, CME343 Construction Estimating, CME226 Statics & Mechanics of Materials, CME332 Mechanical and Electrical Systems, CME453 Construction Planning & Scheduling. Mainly to implement the program's philosophy that CM students should take at least one CM class in each semester to be more familiar with CM program and engaged in CM program business and activities.
- 13. Changing the course number of CME 306 Engineering Materials for Sustainable Construction (3 Credit Hours) to CME 106. Currently, CME 306 is offered in Spring semester of Sophomore year. Since this class will be moved to Spring semester of Freshman year, we propose to change its course number to CME 106 to be more suitable for a Freshman class.
- 14. Changing the course number and title of CME 342 Light Construction (3 Credit Hours) to CME 142 Introduction to Construction Management: Light Construction. Responding to the sequence change of class offering, this class will be moved to Fall semester of Freshmen year, and we propose to change its course number and title to CME 142 Introduction to Construction Management: Light Construction (3 Credit Hours)
- 15. Changing the semester of offering for CME 226 Statics and Mechanics of Materials (4 Credit Hours) from Spring to Fall. CME 226 is a prerequisite for CME 404. In the current curriculum, CME 226 is offered in Spring semester of Sophomore year and CME 404 is offered in Spring semester of Junior year. It is found that with the 1-year gap, students can easily forget the knowledge they learned from CME 226 which brings challenges to their learning process in CME 404. To improve their learning effects in CME 404, we propose to reduce the time gap between CME 226 and CME 404 by moving CME 226 from Spring semester of Sophomore year to Fall semester of Junior year.
- 16. Changing the semester of offering for CME 453 Construction Planning & Scheduling (3 Credit Hours) from Fall to Spring. CME 453 is a perquisite for CME 440. Since CME 440 is proposed to be offered in Fall semester of Senior year, we propose to move CME 453 from Fall semester of Senior year to Spring semester of Junior year.
- 17. Changing the semester of offering for CME 343 Construction Estimating (3 Credit Hours) from Spring to Fall. Because CME 453 is moved to be one semester earlier relative to its position in current curriculum, CME 343 is proposed to be moved from Spring semester of Junior year to Fall semester of Junior year.
- 18. Changing the semester of offering for CME 255 Plan Interpretation and Quantity Takeoff (3 Credit Hours) from Fall to Spring. Since CME 343 is to be moved from Spring semester of Junior year to Fall semester of Junior year, CME 255 is proposed to be moved from Fall semester of Junior year to Spring semester of Sophomore year.
- 19. Reduce the number of Credit Hours for CME 488 Professional Construction Project Management Presentation Seminar from 2 Credit Hours to 1 Credit Hour, to better reflect the workload.
- 20. The total number of Credit Hours required for graduation is decreased from 124 Credit Hours to 122 Credit Hours.

**b) Provide** a side-by-side comparison of all the courses in the existing and proposed revised program that clearly indicates all new or significantly revised courses, and other changes.

Color legend

Course from 2004 curriculum that will remain in proposed revision (some have new prefix, but essentially same class)									
Course that was previously dropped from 2004 curriculum									
Course that previously replaced a course in 2004 curriculum									
Course that was previously added to the curriculum since 2004									
Proposed new change in current revision									
2004-2005 CM Curriculum (link pg 372 in PDF)		Proposed 2024-2025 Curriculum							
Lower Division									
WPE 132 Orientation Seminar: WPE	1	CME132 Orientation Seminar: Sust. Cons. Manag.	1						
APM 105 Calculus I G3	4	APM103 Applied College Algebra and Trigonometry	3						
APM 106 Calculus II	4	Previously Dropped	_						
APM 153 Computing Methods	3	Previously Dropped							
CLL 190 Writing and the Environment G	3	EWP 190 Writing and the Environment G	3						
CLL 290 Writing, Humanities and the Environment G	3	EWP 290 Writing, Humanities and the Environment G	3						
EFB 120 The Global Environment & Evol. of Human Society	С	Previously Dropped							
EFB 226 General Botany	4	Previously Dropped							
ERE 221 Engineering Mechanics: Statics	3	Previously Replaced with CME 226 Statics & Mechanics of Materials	4						
ERE 362 Mechanics of Materials	3	Previously Dropped							
FCH 150 General Chemistry I G	3	Previously Replaced with FCH 110 Survey of Chemical Principles and Lab	3						
FCH 151 General Chemistry Laboratory I	1	Previously Replaced with FCH 111 Survey of Chemical Principles Lab	1						
FOR 207 Introduction to Economics G	3	FOR 207 Introduction to Economics G	3						
PHY 211 General Physics I	3	FOR 110 Environmental Physics	3						
PHY 221 General Physics Lab I	1	Drop							
General Education Course: American History G	3	Previously Replaced with GenED – Choice from 4 areas	3						
General Education Course: Other World Civilizations G	3	Previously Replaced with GenED – DEISJ	3						
General Education Course: Western Civilization G	3	Previously Dropped							
General Education Course: The Arts G	3	Previously Dropped							
Upper Division									
ESF 332 Seminar for New Transfer Students	0	Previously Dropped							
APM 391 Introduction to Probability and Statistics	3	APM 391 Introduction to Probability and Statistics	3						
CIE 337 Soil Mechanics and Foundations I	4	Previously Dropped							
CIE 338 Foundation Engineering OR Elective	3	Previously Dropped							
ERE 371 Surveying for Engineers	4	CME 371 Surveying for Construction Managers	1						
FOR 360 Principles of Management	3	FOR 360 Principles of Management for Env. Prof.	3						
WPE 331 Construction Safety	3	CME 331 Construction Safety	3						
WPE 335 Cost Engineering	3	CME 335 Cost Engineering	3						
WPE 342 Light-Frame Construction	3	CME 142 Introduction to CM: Light Construction	3						
WPE 343 Construction Estimating	3	CME 343 Construction Estimating	3						
WPE 387 Wood Structures and Properties	3	RMS 387 Renewable Material for Sust. Construction	3						
WPE 404 Timber Design Project	3	Previously Replaced with CME404 Applied Structures	3						
WPE/LSA 410 Computer-Aided Design and Drafting	3	Previously Dropped							
WPE 422 Composite Materials	3	CME 422 Composite Materials	3						
WPE 453 Construction Planning and Scheduling	3	CME 453 Construction Planning and Scheduling	3						
WPE 454 Construction Project Management	3	CME 454 Capstone	3						
WPE 455 Construction Contracts and Specs	3	CME 455 Construction Contracts and Specs	3						
WPE 497 Senior Seminar	3	Previously changed CME 497 Senior Ethics Seminar	1						
Electives (combined lower and upper division)	21	Electives - Previous Change in credits	18						
		Previously added FOR 205 Principles of Accounting	3						
		Previously added EWP 220 Public Presentation Skills	3						
		Previously added CME 106 Engineering Materials for Sustainable Construction	3						
		Previously added CME 303 Construction Management Internship	1						
		Previously added CME 305 Sustainable Energy Systems for Buildings	3						
		Previously added CME 215 Sustainable Construction	3						
		Previously added CME 255 Plan Interpretation & Quantity Takeoff	3						
		Previously added CME 332 Mechanical and Electrical Systems	3						
		Previously added CME 327 Site Investigations and Solutions	3						
		Previously added CME 405 Building Information Modeling for CM	3						
		Previously added FOR 485 Business and Managerial Law	3						
		CME 440 Capstone Planning	1						
		CME 456 Adv Skills for Construction Management	3						
		Independent learning elective (either CME 403, 488 or 490)	1						
TOTAL	128	TOTAL	122						

- c) For each new or significantly revised course, provide a syllabus at the end of this form, and, on the SUNY Faculty Table provide the name, qualifications, and relevant experience of the faculty teaching each new or significantly revised course. NOTE: Syllabi for all courses should be available upon request. Each syllabus should show that all work for credit is college level and of the appropriate rigor. Syllabi generally include a course description, prerequisites and corequisites, the number of lecture and/or other contact hours per week, credits allocated (consistent with <u>SUNY</u> policy on credit/contact hours), general course requirements, and expected student learning outcomes.
- d) What are the additional costs of the change, if any? If there are no anticipated costs, explain why.

Anticipated Enrollment or Enrollment Change: There may be a minor increase in student retention and enrollment.

Faculty or Staffing Requirements: There will be minor impacts on faculty and staffing requirements. The new class CME 371 needs an instructor to teach. Department Chair Christopher Nowak has identified one colleague from Ranger School at ESF to teach it.

Technology, Computing Resources, and Classroom Resource Demands: There will be no new demands for technology, computing resources, and classroom resources.

Change in Accreditation Requirements: The deletion of CME 304 Environmental Performance Measures for Buildings (3 Credit Hours) will eliminate the need for collecting performance information from the class for ACCE assessment on specific Student Learning Outcome (SLO#18 Understand the basic principles of sustainable construction).

Changes to Assessment Plan: CME 215 can be used for assessing SLO#18 Understand the basic principles of sustainable construction.

Library Resource Requirements: Current library resources can support the new curriculum.

#### Section 2.2. Other Changes

Check all that apply. Describe each proposed change and why it is proposed.

- [] Program title
- [] Program award
- [] <u>Mode of delivery</u>

**NOTES:** (1) If the change in delivery enables students to complete 50% of more of the program via distance education, submit a <u>Distance Education Format Proposal</u> as part of this proposal. (2) If the change involves adding an accelerated version of the program that impacts financial aid eligibility or licensure qualification, SED may register the version as a separate program.

- [] Format change(s) (e.g., from full-time to part-time), based on SED definitions, for the entire program
  - 1) State proposed format(s) and consider the consequences for financial aid
  - 2) Describe availability of courses and any change in faculty, resources, or support services.
- [] A change in the total number of credits in a certificate or advanced certificate program

[] Any change to a registered licensure-qualifying program, or the addition of licensure qualification to an existing program. **Exception:** Small changes in the required number of credits in a licensure-qualifying program that <u>do not</u> <u>involve</u> a course or courses that satisfy one of the required content areas in the profession.

### Section 3. Program Schedule and Curriculum

a) For <u>undergraduate programs</u>, complete the *SUNY Undergraduate Program Schedule* to show the sequencing and scheduling of courses in the program. If the program has separate tracks or concentrations, complete a *Program Schedule* for each one.

**NOTES:** The **Undergraduate Schedule** must show all curricular requirements and demonstrate that the program conforms to SUNY's and SED's policies.

- It must show how a student can complete all program requirements within <u>SUNY credit limits</u>, unless a longer period is selected as a format in Item 2.1(c): two years of full-time study (or the equivalent) and 64 credits for an associate degree, or four years of full-time study (or the equivalent) and 126 credits for a bachelor's degree. Bachelor's degree programs should have at least 45 credits of <u>upper division study</u>, with 24 in the major.
- It must show how students in A.A., A.S. and bachelor's programs can complete, within the first two years of fulltime study (or 60 credits), no fewer than 30 credits in <u>approved SUNY GER courses</u> in the categories of Basic Communication and Mathematics, and in at least 5 of the following 8 categories: Natural Science, Social Science, American History, Western Civilization, Other World Civilizations, Humanities, the Arts and Foreign Languages
- It must show how students can complete <u>Liberal Arts and Sciences (LAS) credits</u> appropriate for the degree.
- When a SUNY Transfer Path applies to the program, it must show how students can complete the number of SUNY Transfer Path courses shown in the <u>Transfer Path Requirement Summary</u> within the first two years of full-time study (or 60 credits), consistent with SUNY's <u>Student Seamless Transfer policy</u> and <u>MTP 2013-03</u>.
- Requests for a program-level waiver of SUNY credit limits, SUNY GER and/or a SUNY Transfer Path require the campus to submit a <u>Waiver Request</u>—with compelling justification(s).

Term 2: Fall 20xx		Credits per classification					
Course Number & Title	Cr	GER	LAS	Maj	TPath	New	Prerequisite(s)
ACC 101 Principles of Accounting	4			4	4		
MAT 111 College Mathematics	3	М	3	3			MAT 110
CMP 101 Introduction to Computers	3						
HUM 110 Speech	3	BC	3			Х	
ENG 113 English 102	3	BC	3				
Term credit total:	16	6	9	7	4		

### **EXAMPLE FOR ONE TERM: Undergraduate Program Schedule**

b) For <u>graduate programs</u>, complete the SUNY Graduate Program Schedule. If the program has separate tracks or concentrations, complete a Program Schedule for each one.

**NOTE:** The **Graduate Schedule** must include all curriculum requirements and demonstrate that expectations from *Part 52.2(c)(8) through (10) of the Regulations of the Commissioner of Education are met.* 

#### SUNY Undergraduate Program Schedule (*OPTION: You can paste an Excel version of this schedule AFTER this line, and delete the rest of this page.*) Program/Track Title and Award: Construction Management (B.S.)

a) Indicate academic calendar type: [X] Semester [] Quarter [] Trimester [] Other (describe):

b) Label each term in sequence, consistent with the institution's academic calendar (e.g., Fall 1, Spring 1, Fall 2)

c) Use the table to show how a typical student may progress through the program; copy/expand the table as needed. Complete all columns that apply to a course.

Term 1: Fall 1			See KE	Υ.				Term 2: Spring 1			See KE	Υ.			
Course Number & Title	Cr	GER	LAS	Maj	TPath	New	<b>Co/Prerequisites</b>	Course Number & Title	Cr	GER	LAS	Maj	TPath	New	<b>Co/Prerequisites</b>
CME 132 Orientation Seminar:	1		1	1				APM 103 Applied Alg& Trig	3	М	3			Х	
CME 142 Intro Cons Mgt: Light Cons	3			3				CME 106 Eng Mat Sus Cons	3			3			
EWP 190 Writing & the Environment	3	BC	3					EWP 290 Res Writing&Human	3	Н	3				
FCH 110 Survey of Chem	3	NS	3					FOR 207 Intro to Economics	3	SS	3				
FCH 111 Survey of Chem Lab	1		1					GER	3	Choice	3				
FOR 205 Princ of Accounting	3														
GER in DEISJ	3	DEISJ	3												
Term credit totals:	17	9	11	4				Term credit totals:	15	12	12	3			
Term 3: Fall 2			See KE	Υ.				Term 4: Spring 2			See KE	Υ.			
Course Number & Title	Cr	GER	LAS	Maj	TPath	New	<b>Co/Prerequisites</b>	Course Number & Title	Cr	GER	LAS	Maj	TPath	New	<b>Co/Prerequisites</b>
CME 331 Construction Safety	3		3	3				APM 391 Intro to Prob & Stats	3	М	3				
EWP 220 Public Presentation Skills	3	BC	3					CME 215 Sustain Construction	3		3	3			
FOR 110 Environmental Physics	3	NS	3					CME 255 Plan Interp/Qty Take	3			3			
FOR 360 Prin of Mgt for Env. Prof	3		3					Free Elective	6		6				
Free Elective	3		3												
Term credit totals:	15	6	15	3				Term credit totals:	15	3	12	6			
Term 5: Fall 3			See KE	Υ.				Term 6: Spring 3		_	See KE	Υ.			
Course Number & Title	Cr	GER	LAS	Maj	TPath	New	<b>Co/Prerequisites</b>	Course Number & Title	Cr	GER	LAS	Maj	TPath	New	<b>Co/Prerequisites</b>
CME 226 Statics & Mech of Materials	4			4			FOR110	CME 332 Mech and Elec Sys	3			3			
CME 303 Cons Mgt Internship	1			1			Jr/Sr	CME 404 Applied Structures	3			3			CME226
CME 305 Sus Energy Sys Buildings	3			3				CME 453 Cons Plan & Sched	3			3			CME343
CME 343 Construction Estimating	3			3			CME255	FOR 485 Bus & Man Law	3		3				
CME 371 Surveying for Cons Mgrs	1		1	1		Х		RMS 422 Comp Mat Sus Cons	3			3			CME 226; RMS 387
RMS 387 Renew Mat for Sus Cons	3			3											
Term credit totals:	15		1	15				Term credit totals:	15		6	12			
Term 7: Fall 4		<u>s</u>	See KE	Υ.				Term 8: Spring 4			See KE	Υ.			
Course Number & Title	Cr	GER	LAS	Maj	TPath	New	<b>Co/Prerequisites</b>	Course Number & Title	Cr	GER	LAS	Maj	TPath	New	<b>Co/Prerequisites</b>
CME 327 Site Investigations & Solns	3			3				CME 405 BIM Cons Mgt	3			3			CME255; CME343
CME 335 Cost Engineering	3			3				CME 454 Capstone	3			3			CME343; CME453, Sr
CME 440 Capstone Planning	1			1		Х	CME343; CME453; Sr	CME 455 Contracts & Specs	3			3			Jr/Sr
CME 497 Senior Ethics Seminar	1		1	1			Sr.	CME 456 Adv Skills Cons Mgt	3			3		Х	
Directed elective	1			1				Free Elective	3		3				
Free elective	6		6												
Term credit totals:	15		7	9				Term credit totals:	15		6	12			
			a 11	~		<b>.</b>					D		Numbe	er of SU	NY GER Categories:
Program Totals (in credits):		Total 122	Credits	: SU 30	NY GER	: LAS	S: Major: 76	Elective & Other: Upper D	livisio	n: Upp Ma	oer Divi jor: 48	ision	7	05/0	

KEY Cr: credits GER: <u>SUNY General Education Requirement</u> (Enter Category Abbreviation) LAS: <u>Liberal Arts & Sciences</u> (Enter credits) Maj: Major requirement (Enter credits) TPath: <u>SUNY Transfer Path</u> Courses (Enter credits) New: new course (Enter X) Co/Prerequisite(s): list co/prerequisite(s) for the noted courses Upper Division: Courses intended primarily for juniors and seniors SUNY GER Category Abbreviations: American History (AH), Basic Communication (BC), Foreign Language (FL), Humanities (H), Math (M), Natural Sciences (NS), Other World Civilizations (OW), Social Science (SS), The Arts (AR), Western Civilization (WC)

# Section 4. SUNY Faculty Table

a) If applicable, provide information on faculty members who will be teaching new or significantly revised courses in the program. Expand the table as needed.

**b)** Append at the end of this document position descriptions or announcements for each to-be-hired faculty member

(a)	(b)	(c)	(d)	(e)	(f)		
Faculty Member Name and Title and/or Rank at the Institution (Include and identify Program Director.)	% of Time Dedicated to This Program	Program Courses Which May Be Taught (Number and Title)	Highest and Other Applicable Earned Degrees (include College or University)	Discipline(s) of Highest and Other Applicable Earned Degrees	Additional Qualifications: List related certifications and licenses and professional experience in field.		
PART 1. Full-Time Faculty							
Paul Crovella, Associate Professor	100%	CME 403 Construction Management Internship II CME 456 Advanced Skills for Construction Management	PhD, State University of New York College of Environmental Science and Forestry	Environmental Resources Engineering			
Mohammad Uzzal Hossain, Assistant Professor	100%	CME 403 Construction Management Internship II CME 456 Advanced Skills for Construction Management	PhD, The Hong Kong Polytechnic University	Civil and Environmental Engineering			
Endong Wang, Associate Professor	100%	CME 403 Construction Management Internship II CME 440 Capstone Planning CME 456 Advanced Skills for Construction Management CME 490 Certified Associate Constructor Exam Preparation	PhD, University of Nebraska- Lincoln	Construction Engineering			
Part 2. Part-Time Faculty					L		
Jeremy E Thompson, Instructor (Program Director: Mariann Johnston) Part 3. To-Be-Hired Faculty (List as TBH1 TBH2 atc. and provide expected)	10%	CME 371 Surveying for Construction Managers	A.A.S., SUNY ESF, Ranger School	Forest Technology	Professional Land Surveyor		
hiring date instead of name.)							
TBH1 (Fall 2024)	100%	CME 456 Advanced Skills for Construction Management	PhD	Construction Management			

## Appendix A - Position description for new hire

## **Assistant Professor- Sustainable Construction Management**

The SUNY-ESF Department Sustainable Resources Management (<u>http://www.esf.edu/srm/</u>) invites applications for an academic-year, tenure-track position at the Assistant Professor level in its Construction Management program. The area of specialization should complement and expand upon current departmental strengths in construction management.

## **Responsibilities**:

SUNY-ESF seeks teacher-scholars committed to excellence in both teaching and research. Teaching responsibilities will include some of the undergraduate courses required for the current construction management major. Teaching responsibilities may include courses such as Contracts and Specifications, Site Investigations-Geotechnical related, Mechanical/Electrical (MEP), Safety, Plan Interpretation, as well as graduate level, shared resources versions of these courses. Other responsibilities include advising and mentoring undergraduate students in the Construction Management Program and mentoring graduate students at the Masters and Doctoral levels. The successful candidate will be expected to develop an extramurally funded and successful research program in their area of expertise as well as actively engage in the areas of pedagogy, curriculum, student advising, and interdisciplinary initiatives within the College. Capabilities to develop online courses in the listed areas are also highly desired. Professional and public service is also expected, as is significant interaction with colleagues and students in other disciplines at the College as well as with Syracuse University and the broader academic community. We are particularly interested in candidates with a commitment to diversity and inclusiveness.

# About the Sustainable Construction Management Program at ESF:

The Bachelor of Science in Sustainable Construction Management degree at SUNY-ESF combines the classical elements of a strong technical construction focus on materials, means and methods, and structural form and function, with a solid core of management-based skills including the interpretation of construction documents and contracts, estimating and scheduling of materials, labor, and machinery, and finances and contract administration for project control. A distinguishing characteristic of the program is a unique emphasis on environmentally sustainable approaches and appropriate technology throughout the curriculum. The program, in conjunction with its external advisory board, has built up a strong working relationship with construction firms and contractors in the region and its graduates have an outstanding record of placement and accomplishments.

# **Requirements**:

# **Required Qualifications:**

- PhD in Construction Management or related discipline by the date of hire, ABD will be considered
- Professional experience in construction management or related discipline

# **Preferred Qualifications:**

- A record of teaching and service, commensurate with time since degree
- Record of scholarly publications
- Record of collaboration on extramural-funded research
- Professional registration/certification (PE, AIA, PMP, CPC, LEED AP)
- Successful upper-level industry experience

# Additional Information:

About the College of Environmental Science and Forestry:

The SUNY College of Environmental Science and Forestry is located in Syracuse, New York, a dynamic and diverse community with plentiful natural, cultural, and civic opportunities. "The Places Rated Almanac" ranks Syracuse among the top 10 percent of "Best Places to Live." Located on the eastern edge of the Finger Lakes, Syracuse is within easy travel to New York City, Boston, Philadelphia, Montreal, and Toronto as well as the High Peaks Region of the Adirondack Mountains. SUNY-ESF is one of eight colleges and universities located in Onondaga County. The Syracuse University campus is immediately adjacent to SUNY-ESF, and SUNY Upstate Medical University is located within easy walking distance.

The ESF campus provides a rich array of curricular and co-curricular experiences with our main Syracuse campus just southeast of downtown Syracuse and our regional campuses stretching from southern Onondaga County to the Adirondacks. The Syracuse area, location of our main campus, is home to many cultural events, museums, state and local parks and numerous festivals throughout the year along with a growing downtown in the city of Syracuse. Onondaga County provides a variety of neighborhoods including urban, rural and suburban with strong schools, affordable housing and supportive communities.

Central New York is also home to numerous hospitals and medical facilities including SUNY Upstate Medical University, the St. Joseph's Hospital Health Center, the VA Hospital of Syracuse, and Crouse Hospital with all providing unique specialty areas to support the needs of the community.

The SUNY College of Environmental Science and Forestry is committed to creating and sustaining a diverse community that promotes equity and inclusion for all its members. Diversity that arises from differences such as, but not limited to, gender, race, ethnicity, ability, sexual orientation, socioeconomic status, national origin, or religious traditions is central and indispensable to the institutional excellence and mission of the College. ESF is actively recruiting diverse faculty of all backgrounds. In efforts and our commitment to the goal of building a diverse workforce we are participating in PRODiG. PRODiG ("Promoting Recruitment, Opportunity, Diversity, Inclusion and Growth") aims to increase the representation of historically underrepresented faculty at SUNY including underrepresented minority ("URM") faculty in general and women faculty of all races in STEM fields ("WSTEM"). <a href="https://www.suny.edu/prodig/">https://www.suny.edu/prodig/</a>

SUNY-ESF is an equal opportunity/affirmative action employer. All qualified applicants will receive consideration for employment without regard to sex, gender identity, sexual orientation, race, color, religion, national origin, disability, protected veteran status, age, or any other characteristic protected by law.

# **Application Instructions:**

**Application Procedure**: Application materials are required to be submitted online and should include: (1) a cover letter, (2) a curriculum vitae, (3) a 1-2 page statement of research interests and experience (4) a 1-2 page teaching statement and (5) a 1 page statement addressing how the candidate will contribute to SUNY ESF's Inclusion Diversity and Equity goals. References will be requested if you are selected as a finalist. Application Deadline: Applications for all positions will be accepted until the position is filled. For optimal consideration applications should be submitted by **February 15, 2024**.

Appendix B - Syllabi of New Courses