BS in Civil Engineering/Civil Engineering Major Curriculum Flow Chart - Major declared Fall 2020 or later

Pre-engineering → Civil Major

Term 1	Term 2	Summer	Term 3	Term 4	Term 5	Term 6	Term 7	Term 8
Total hours = 15	Total hours = 15	Total hours = 12	Total hours = 16	Total hours = 13	Total hours = 16	Total hours = 14**	Total hours = 15	Total hours = 12
ENC1101 (3) or ENC 1121 (FAMU only) Pre-req: CHECK GENERAL BULLETIN	NC 1102 (FAMU) ENC 2135 (FSU) or other approved Second English Pre-req: ENC 1101	Liberal Studies Course (3) Pre-req: CHECK GENERAL BULLETIN	PHY2049C OR PHY 2049/L (5) Physics II & Lab Pre-reqs: PHY 2048C, MAC 2312	EGM 3512 (4) Eng. Mechanics Pre-req: PHY 2048C MAC 2312 Co/pre-req. MAC 2313	EGN 3331 (3) Strength of Materials Pre-req: EGM 3512	CES 3100 (4) Structural Analysis Pre-req: EGM 3512 Co/pre-reqs: EGN 3331, MAP 2302	CGN 4800 (3) * Senior Design Project I Pre-reqs: CGN 3326 & EGN3331; Instructor Permission	CGN 4802 (3) * Senior Design Project II Pre-req: CGN 4800 Senior Standing
Liberal Studies Course (3) Pre-req: CHECK GENERAL BULLETIN	Liberal Studies Course (3) Pre-req: CHECK GENERAL BULLETIN	Liberal Studies Course (3) Pre-req: CHECK GENERAL BULLETIN	STA XXXX (3) Statistics Course GROUP D See approved course list on back page	CEG 2202/L (3+1) Intro to Geomat & Lab Pre-Req: MAC 2311 Course & lab must be taken same semester	CEG 3011 (3) Soil Mechanics Co/pre-req: EGN 3331	EML 3100 (2) Thermo Dynamics Pre-reqs: MAC2312, CHM 1045, PHY 2048 OR EEL 3003 (3) Intro to Electrical Eng LAB NOT REQUIRED Pre-req: MAC 2312, PHY 2049C	CEG 4801(3) Geotech Design Pre-req: CEG 3011 Co/pre-req: CGN3508L	TTE 4XXX(3) Trans. Elec OR CCE 4XXX(3) Construction Elec Pre-req: CHECK GENERAL BULLETIN
CHM 1045/L (4) General Chem I & Lab Pre-req: MAC 1105 Co-req: CHM 1045L	PHY2048C OR PHY 2048/L (5) Physics I & Lab *Req. to Declare Major* Pre-req: MAC 2311	Liberal Studies Course (3) Pre-req: CHECK GENERAL BULLETIN	MAC 2313 (5) Calculus III Pre-req: MAC 2312	MAP 2302 (3) ODE OR MAP 3305 (3) Eng Math Pre-req: MAC 2313 or "B" in MAC 2312	CGN 3326 (3) CE Graphics & Design Tools Pre-req: CEG 2202&L		CES 4702(3) Conc Des OR CES 4605(3) Steel Design Pre-req: EGN 3331 CES 3100 Co/Pre-req: CGN 3508L	XXX XXXX (3) Group B Eng/Math/Sci See approved course list on back page
MAC 2311 (4) Calculus I *Req. to Declare Major* Pre-req: MAC 1114 & MAC 1140 or 1147	MAC 2312 (4) Calculus II *Req. to Declare Major* Pre-req: MAC 2311	XXX XXXX (3) Science Elective GROUP A See approved course list on back page	EES 3040 (3) Intro.to Environmental Engineering Pre-reqs: CHM 1045&L, MAC 2311	EGN3613 (2) Eng. Economy Pre-req: MAC 2313	CWR 3201 (3) Hydraulics Pre-req: EGM 3512	CCE 3101 (3) Const. Materials Pre-req: EGN 3331	ENV 4XXX(3) Env Elec OR CWR 4XXX Wat Res Elec Pre-req: CHECK GENERAL BULLETIN	XXX XXXX (3) Group C Prof/Tech See approved course list on back page
EGN 1004L (1) First Year Eng. Lab *Req. to Declare Major* Pre-req: Must be in Pre-Eng. Major		DECLARE YOUR MAJOR *Go to:* Student Services at COE			TTE 3004 (3) Trans. Eng. Pre-req: STAXXXX, CEG 2202, CEG 2202L	CGN3508L (1) CE Materials Lab Pre-req: EGN3331 Co/pre-req: CCE 3101 or CEG 3011	XXX XXXX (3) Group B Eng/Math/Sci See approved course list on back page	APPLY FOR GRADUATION ONLINE 2ND WEEK OF SEMESTER
					CWR 3200L (1) Env/Hyd Eng Lab Co/pre-req: CWR 3201 or EES 3040	XXX XXXX (3) Group B Eng/Math/Sci See approved course list on back page	SIGN UP FOR FE EXAM Go to: FBPE.ORG	
					OPTIONAL: CHECK FOR INTERNSHIP OPPORTUNITIES AT CAREER SERVIES/COE		COMPLETE DEPARTMENT & UNIVERSITY GRAD CHECKS	

***Capstone senior design sequence must be taken sequentially. In addition:**

- CGN 3326 meets FSU's Digital Literacy requirement
- CGN 4800 meets FSU's UDW & SIP requirements
- CGN 4802 meets FSU's FE (Formative Experience) requirement
- CGN 4800 & CGN 4802 together meet FSU's OCC (Oral Communications Competency) req.

****Students who take EML 3100 will complete this coursework with 127 hours. Students remain subject to the university-level requirement of 128 credit hours for graduation and will need to satisfy remaining credit hour(s) to meet 128 with additional coursework.**

Reset

This flowchart is a suggested academic map; Students may take any course if pre-requisite requirements are met.
See http://eng.famu.fsu.edu/cee/undergraduate/resources for additional pre-req and advising information.

Updated: 11/04/2026

BS in Civil Engineering/Environmental Engin. Major Curriculum Flow Chart - Major declared Fall 2020 or later

Pre-engineering → Environmental Major

Term 1	Term 2	Summer	Term 3	Term 4	Term 5	Term 6	Term 7	Term 8
Total hours = 15	Total hours = 15	Total hours = 12	Total hours = 16	Total hours = 13	Total hours = 16	Total hours = 13**	Total hours = 16	Total hours = 12
ENC1101 (3) or ENC 1121 (FAMU only) Pre-req: CHECK GENERAL BULLETIN	**NC 1102 (FAMU) ENC 2135 (FSU)** or other approved Second English Pre-req: ENC 1101	**Liberal Studies Course (3)** Pre-req: CHECK GENERAL BULLETIN	**PHY2049C OR PHY 2049/L (5) Physics II & Lab** Pre-reqs: PHY 2048C, MAC 2312	**EGM 3512 (4) Eng. Mechanics** Pre-req: PHY 2048C MAC 2312 Co/pre-req. MAC 2313	**EGN 3331 (3) Strength of Materials** Pre-req: EGM 3512	**NV 4001 OR 4500 (3) Env Engineering OR Env Unit Processes** Pre-req: CHECK GENERAL BULLETIN	**CGN 4800 (3) * Senior Design Project I** Pre-reqs: CGN 3326 & EGN3331; Instructor Permission	**CGN 4802 (3) * Senior Design Project II** Pre-req: CGN 4800 Senior Standing
Liberal Studies Course (3) Pre-req: CHECK GENERAL BULLETIN	**Liberal Studies Course (3)** Pre-req: CHECK GENERAL BULLETIN	**Liberal Studies Course (3)** Pre-req: CHECK GENERAL BULLETIN	**STA XXXX (3)** Statistics Course **GROUP D** See approved course list on back page	**CEG 2202/L (3+1) Intro to Geomat & Lab** Pre-Req: MAC 2311 Course & lab must be taken same semester	**CEG 3011 (3) Soil Mechanics** Co/pre-req: EGN 3331	**EML 3100 (2) Thermo Dynamics** Pre-reqs: MAC2312, CHM 1045, PHY 2048 **OR** **EEL 3003 (3) Intro to Electrical Eng** LAB NOT REQUIRED Pre-req: MAC 2312, PHY 2049C	**CEG 4801(3) Geotech Design** Pre-req: CEG 3011 Co/pre-req: CGN3508L	**TTE 4XXX(3) Trans. Elec OR CCE 4XXX(3) Construction Elec** Pre-req: CHECK GENERAL BULLETIN
CHM 1045/L (4) General Chem I & Lab Pre-req: MAC 1105 Co-req: CHM 1045L	**PHY2048C OR PHY 2048/L (5) Physics I & Lab** *Req. to Declare Major* Pre-req: MAC 2311	**Liberal Studies Course (3)** Pre-req: CHECK GENERAL BULLETIN	**MAC 2313 (5) Calculus III** Pre-req: MAC 2312	**MAP 2302 (3) ODE** **OR** **MAP 3305 (3) Eng Math** Pre-req: MAC 2313 or "B" in MAC 2312	**CGN 3326 (3) CE Graphics & Design Tools** Pre-req: CEG 2202&L	**CCE 3101 (3) Const. Materials** Pre-req: EGN 3331	**CHM 1046/L (4)Chem II** **OR** **MCB 2004/L(4) FSU** **OR** **MCB 3005C(4) FAMU**	**XXX XXXX (3) Group B Eng/Math/Sci** See approved course list on back page
MAC 2311 (4) Calculus I *Req. to Declare Major* Pre-req: MAC 1114 & MAC 1140 or 1147	**MAC 2312 (4) Calculus II** *Req. to Declare Major* Pre-req: MAC 2311	**XXX XXXX (3) Science Elective GROUP A** See approved course list on back page	**EES 3040 (3) Intro.to Environmental Engineering** Pre-reqs: CHM 1045&L, MAC 2311	**EGN3613 (2) Eng. Economy** Pre-req: MAC 2313	**CWR 3201 (3) Hydraulics** Pre-req: EGM 3512	**CGN3508L (1) CE Materials Lab** Pre-req: EGN3331 Co/pre-req: CCE 3101 or CEG 3011	**CWR 4XXX (3) Water Resources Elec** Pre-req: CHECK GENERAL BULLETIN	**XXX XXXX (3) Group C Prof/Tech** See approved course list on back page
EGN 1004L (1) First Year Eng. Lab *Req. to Declare Major* Pre-req: Must be in Pre-Eng. Major		**DECLARE YOUR MAJOR** *Go to:* **Student Services at COE**			**TTE 3004 (3) Trans. Eng.** Pre-req: STAXXXX, CEG 2202, CEG 2202L	**XXX XXXX (3) Group B Eng/Math/Sci** See approved course list on back page	**XXX XXXX (3) Group B Eng/Math/Sci** See approved course list on back page	**APPLY FOR GRADUATION ONLINE 2ND WEEK OF SEMESTER**
					CWR 3200L (1) Env/Hyd Eng Lab Co/pre-req: CWR 3201 or EES 3040		**SIGN UP FOR FE EXAM Go to: FBPE.ORG**	
					OPTIONAL: CHECK FOR INTERNSHIP OPPORTUNITIES AT CAREER SERVIES/COE		**COMPLETE DEPARTMENT & UNIVERSITY GRAD CHECKS**	

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****Students who take EML 3100 will complete this coursework with 127 hours. Students remain subject to the university-level requirement of 128 credit hours for graduation and will need to satisfy remaining credit hour(s) to meet 128 with additional coursework.**

This flowchart is a suggested academic map; Students may take any course if pre-requisite requirements are met.
See http://eng.famu.fsu.edu/cee/undergraduate/resources for additional pre-req and advising information.

Updated: 11/04/2026

GROUP A : Science Elective Courses (select ONE)

- **FAMU:**
  - BSC 1005 Biological Science (3)
  - BSC 1010 General Biology I (3)
  - EVR 3023 Introduction to Marine Environment (3)
  - EVR 3235 Atmospheric Processes (3)
  - EVS 4007 Introduction to Environmental Science (3)
  - GLY2010C Principles of Geology
  - PCB 2033 General Ecology (3)
- **FSU:**
  - BSC 1005 General Biology for Nonmajors (3)
  - BSC 2010 Biological Science (3)
  - GLY 1030 Environmental Issues in Geology (3)
  - GLY 2010C Physical Geology (4)
  - ISC 3210 Data Science with Python (3)
  - MET 3231 Intro. to Atmospheric Thermodynamics and Dynamics (3)
  - OCE 4008 Principles of Oceanography (3)
  - PCB 3043 General Ecology (3)

GROUP C: Professional/Technical Elective Courses (select ONE) A course outside of the CEE department emphasizing professional development, computing, and other professional/technical skills.

- **COE**:
  - EGS 3102 Design Thinking for Sustainable and Resilient Systems (3)
  - EIN 4444 Technology Entrepreneurship and Commercialization (3)
- **FAMU:**
  - AGR 4430 GIS and Remote Sensing (3)
  - BCN 4705 Contract Codes and Law (3)
  - COP 3014C Fundamentals of Programming (4)
  - ENC 3243 Technical Report Writing (3)
  - POS 4697 Environmental Law (3)
- **FSU**:
  - COP 3014 Programming I (3)
  - ENC 4212 Editing: Manuscripts, Documents, Reports (3)
  - GIS 2040 Essentials of Geographic Information Systems (3)
  - GIS 4043 & Lab Geographic Information Systems (3+1)
  - GIS 4330 Florida GIS Applications (3)
  - PAD 4380 Disasters: From Shock to Recovery (3)
  - PAD 4391 Foundations in Emergency Management (3)
  - URP 4710 Intro to Transportation Issues and Transportation Planning (3)

- **NOTE**: Multiple special topics (4930/4936) courses may share the same course number. Make sure that you are enrolling in the correct section.

GROUP B: Math/Engineering/Science Elective Courses (select THREE)

All Group B courses may come from the CEE Department. No more than ONE Group B course may be taken from another department.

- **CEE Department (at least two Group B courses must come from this list):**
  - CCE 4xxx Any 4000-level CCE course not meeting another requirement
  - CEG 4xxx Any 4000-level CEG course not meeting another requirement
  - CES 4xxx Any 4000-level CES course not meeting another requirement
  - CWR 4xxx Any 4000-level CWR course not meeting another requirement
  - ENV 4xxx Any 4000-level ENV course not meeting another requirement
  - TTE 4xxx Any 4000-level TTE course not meeting another requirement
  - CGN 4930* Select 4000-level Special Topics (see Academic Coord for info)
- It is recommended that students interested in M.Eng. w/Structures take both CES 4605 and CES 4702

- **FAMU:**
  - BCN 3253 Construction Accounting (3)
  - BCN 4617 Construction Estimating I (3)
  - EVR 3028 Environmental Modeling Principles (3)
  - EVR 3867 Environmental Risk Analysis (3)
  - EVR 4027C Wetlands Preservation and Restoration (4)
  - EVS 3395 Contaminant Hydrogeology (3)
- **FSU:**
  - EOC 4631 Marine Pollution (3)
  - GLY 4451 Introduction to Geophysics (3)
  - GLY 4730 Marine Geology (3)
  - GLY 4751C Introduction to Remote Sensing, Air Photo Interpret & GIS (3)
  - GLY 4884 Environmental Geology I (3)
  - GLY 4820 Principles of Hydrology (3)
  - OCC 4060 Environmental Science Modeling (3)
  - URP 4354 International Transportation Planning (3)
- **COE:**
  - EML 4930* Experimental Methods in Nanoscale Science & Engineering (3)
  - ESI 3312C Operations Research I: Deterministic (3)

GROUP D: Statistics Courses (select ONE)

- **FAMU:**
  - STA 2023 Intro to Probability and Statistics (3)
  - STA 3034 Mathematical Statistics(3)
- **FSU:**
  - STA 2023 Fundamental Statistics (3)
  - STA 2122 Introduction to Applied Statistics (3)
  - STA 3032 Applied Statistics for Engineers and Scientists (3)

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