University of New Hampshire For Students Entering the Program August 2023 and Later
Sophomore Year Junior Year

Revision: 1 June 2025

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See Advising Note 5	See Advising Note 10	See Advising Note 10				
CEE 400 ETS/INQ, Intro Civil		CEE 501 Str of Matls			CEE 797 CONTRACTOR OF P & Dsgn	CEE 798* Proj Plan & Dsgn
4 = done	3	3	4	4	2	2
		!			See Advising Not	tes 16 & 17
CEE 402 CEE 52 2D CAD Environ 1		CEE 505 Intro Sust Engr		E 665 Mech	CEE ject Dsgn Elec	Area Elective 3
See Advising Note 11  CEE 404  Spatial Metrics Elec  WS, 1st Yr			CEE 680 L Struct Analysis		CEEea Elective 2	CEE Area Elective 4
Seen: Cr Grade e.g. PHYS 2 PS, Phys S24, Su24  See Advising PHYS 2 PS, Phys 4	407 PHYS 408 L	CHEM 405 L Chemistry 2.	begin CEE 600-level courses: all double- boxed courses must be GPA ≥ 2.00 in CEE 500 and CEE GPA ≥ 2.00 in CEE courses GPA ≥ 2.00 in double-boxed cours	501	CEEElective	CEE L
MATH 418 A&A of Functions ≥C QR, Calculation		MATH 527 L Diff Eq & Lin Alg	MATH Statistic	elective elective	EE and STE ctives may be n in any order. e caution with rerequisites.	See Advising Note 15
BS, Biological Sci  4  This is the recoorder. Choose when pursuing minors, and do	e carefully g cognates, ual majors.	4	HP, Hist Persp WC, W		on/Policy Elec	To Graduate: ≥ 128 cr. See Note 18 Overall GPA: ≥ 2.00 CEE course GPA: ≥ 2.00
These blank boxes to be used for extra of the state of th	courses and courses required for min	ors or dual majors.				
Student: Architecture Studies Minor	International Affairs Minor	ontinuous line = prerequisite, dashed lir BSCIVE/IA Dual Major	ne = pre- or corequisite, * = "writing   BSCIVE/Sustain. Dual Major	g-intensive" (see Advisi		er triangle = critical path
☐ ARTH 474 (HP) (HP) (HP) (HP) (HP) (HP) (HP) (HP)	(≥ C in all, GPA ≥ 2.5)  ☐ Language through 402  ☐ IA 401  ☐ ECON401/402/EREC411(SS)	(≥ C in IA 401, GPA ≥ 2.5)  Language through 504  IA 401 □ IA 501 □ IA 701  ECON401/402/EREC 411(SS)	□ SUST 401 □ 501 □ 750 □ NBS Elec*: □ SSH Elec*: □ Elective 3: CEE 520	☐ Course 1: ☐ Course 2:	☐ Cour	rse 2:
☐ Elective 2*:	☐ PCH Elective*: ☐ SEEH Elective: CEE 520	□ PCH Elective*: □ SEEH Elective: CEE 520	☐ Elective 5: ☐ Elective 5:	☐ Course 3: ☐☐ Course 4: ☐☐		
	$\square$ SEEH Elective: <u>CEE 520</u> $\square$ $\ge 3$ weeks or 4 cr abroad	☐ 3rd Elective*: <u>CEE 520</u>	*Select BS, HUMA, HP, or WC	☐ Course 5:	☐ Cour	
	*Select HUMA, FPA, HP or WC	□ ≥ 8 weeks abroad before IA 701 *Select HUMA, FPA, or HP	†CEE 705, 706, or 719	☐ Course 6: ☐ Course 7: ☐ Course 8:	□ Cour	rse 7:

The CEE Department encourages you to explore cognates, minors, and dual majors. Listed here are common choices, but there are 6 cognates, 6 dual majors, and dozens of minors to consider. You may pursue multiple cognates, minors, and dual majors. Cognates require 12 cr, minors: 20 cr, dual majors: 32 cr. No more than 8 cr of specified courses can be double-counted. Unspecified Discovery electives used for cognates, minors, and dual majors are not considered as double-counted. There is no limit on overlapping credits allowed between minors. This color = Discovery elective. This color = double-counted course.

### ADVISING NOTES

# Notes for Incoming Students and about Transfer Credit

- 1. AP Courses:
  - a. AP Calc—AB 4,5=MATH 425. BC 3=MATH 425. BC 4,5=MATH 425 & 426.
  - b. AP Chemistry—3=CHEM 403 (still need 404 or 405). 4.5=CHEM 403 & 404.
  - c. AP Environmental Science—You receive credit for NR 435 but still need to take CEE 520.
  - d. AP Physics—Physics1&2:no help. PhysicsC, Mech: 3,4,5=PHYS 407. PhysicsC, E&M: 3,4,5=PHYS 408.
  - e. AP Statistics—Does not count for Statistics Elective as is not calculus-based.
- 2. MATH 425—If you can take MATH 425 in the 1st semester, try to take PHYS 407 in the 1st semester, too.
- 3. International Affairs Dual Major—If starting a new language, begin immediately. Otherwise, seek placement.
- 4. Transfer Students—To transfer into the BSCIVE program, you must meet the following requirements:
  - a. be a CEPS major or have ≥12 cr of graded work at UNH, Calculus I, and either chemistry or calculus-based physics with 4-year program grades of C or better or community college grades of B or better;
  - b. have a GPA  $\geq$  2.33 overall;
  - c. have a GPA ≥ 2.33 in CEE courses taken to date:
  - d. have a GPA ≥ 2.33 in MATH 425, PHYS 407, CHEM 405, CEE 500, and CEE 501 taken to date; and
  - e. have a GPA ≥ 2.33 in CEE 500 & CEE 501 or, if only one has been taken, a grade of C+ in the course.
  - Only CEE 600- and 700-level courses with a grade of C- or better may be transferred in.

## **Notes for Ongoing Students**

- CEE 400 and Advanced Students—If you achieve junior-level status without CEE 400, petition to take a different course such
  as a MATH 500-level or some other CEPS 600-level course. However, be careful to check that you have the Discovery
  Inquiry and ETS requirements fulfilled some other way.
- CHEM 403/404 vs. CHEM 405—You may take both CHEM 403 and CHEM 404 instead of CHEM 405 though this adds a course. If so, CHEM 403 is used instead of 405 for determining CEE 600-level qualification.
- 7. Transfer Credit—Only a grade of C or better counts for UNH credit. Submit a Transfer Credit Prior Approval form before taking a course elsewhere. Transferred courses fulfill requirements but the grades do not transfer or affect the UNH GPA.
- 8. Study Away—You need both a UNH GPA ≥ 2.75 and a GPA in CEE courses ≥ 2.75.
- 9. Writing Intensive Courses—You must take at least four: ENGL 401, 1 CEE, 1 600-level or higher, and 1 additional.
- 10. ME 525/526 vs. CEE 500/501—ME 525 may be taken instead of CEE 500 and ME 526 instead of CEE 501.

## **Notes Regarding Electives**

- 11. Spatial Metrics Electives—CEE 404 (preferred), other options are CEE 403, CT 446, NR 658, FORT 581, or ANTH 674.
- 12. Statistics Elective—MATH 539 or MATH 644. Transfer courses must be calculus-based. AP Credit is insufficient.
- 13. Econ/Policy Elec—BSCIVE program students must register in one of the following: CEP 415, CSL 401, ECON 401, ECON 402, ECON 444, EREC 411, GEOG 582, GEOG 584, or POLT 402.
- 14. WC Discovery Elective—International students and students that study abroad may not have to take the World Cultures Discovery Course. Therefore, delay the WC elective until you're sure you need it.
- 15. Senior Technical Elec.—GEOG 757, INCO 795, NR 757, TECH 750, TECH 780, CEPS or CEE 700-level course ≥ 3 cr.

### **Notes for Seniors**

- 16. Restrictions on the Senior CEE electives:
  - a. You must take four electives in four different areas. (A course listed with two areas can only serve for one.)
  - b. You must take at least three design courses: a PDE plus two more design courses.
- 17. Accelerated Master's Program—If you are a senior with a GPA ≥ 3.20, you can be concurrently admitted to a UNH Master's program and some courses can count for both the BSCIVE and the master's degree. A maximum of 8 cr can be accepted for a UNH MSCE. (Up to 12 cr may be accepted for other master's degrees.)
- 18. Required Credits—128 credits are required. If you meet the BSCIVE requirements with fewer credits, you must make up the difference with additional credits. You may use any UNH or transferred course to make up required credits.

700-LEVEL CEE ELECTIVES										
	CEE Course		redits	SUS	ENV	MAT	WAT	GEO	STR	
Project- Based	749	Pavement Design and Analysis	4 cr			✓				
	778	Foundation Design I	4 cr					✓		
	791	Reinforced Concrete Design	4 cr						✓	
	793	Structural Design in Steel	4 cr						✓	
Addl. Design Electives	719	Green Building Design		✓						
	729	Air Pollution Control	4 cr		✓					
	732	Solid and Hazardous Waste Design*§	4 cr		✓					
	755	Design of Press Water Trans Systems	4 cr				✓			
	758	Stormwater Management Designs	3 cr				✓			
	779	Foundation Design II§	3 cr					✓		
	789	Timber Design	3 cr						<	
	790	Structural Design in Masonry	3 cr						✓	
	792	Prestressed Concrete§	3 cr						✓	
	794	Bridge Design§	3 cr						✓	
Other Electives	700	Building Information Modeling	3 cr							
	703	Site Design and Project Development	3 cr							
	704	Transportation Engineering & Planning	3 cr							
	706	Environmental Life Cycle Assessment	3 cr	✓						
	720	Solid and Hazardous Waste Engineering	3 cr		✓					
	721	Environmental Sampling & Analysis	4 cr		✓					
	721	Environmental Sampling & Analysis	4 cr		✓					
	722	Introduction to Marine Poll & Control	4 cr		✓					
	723	Water Chemistry	4 cr		✓					
	724	Environmental Engineering Microbiology*	4 cr		✓					
	730	Public Health Engr Rural & Develop	3 cr		✓					
	731	Advanced Water Treatment Processes§	4 cr		✓					
	733	Public Infrastructure Asset Management	4 cr	✓						
	735	Properties and Production of Concrete	3 cr			✓				
	736	Asphalt Mixtures and Construction	3 cr			✓				
	737	Pavement Rehab., Maint., & Mgmt.	3 cr			✓				
	751	Open Channel Flow	3 cr				✓			
	753	Snow Hydrology	3 cr				✓			
	754	Engineering Hydrology	3 cr				✓			
	759	Stream Restoration	4 cr				✓			
	765	Engineering Behavior of Soils	4 cr					✓		
	766	Intro to Geotech Earthquake Engineerings						✓		
	768	Geo-Environmental Engineering†	3 cr		✓			<b>√</b>		
	780	Matrix Structural Analysis & Modeling	3 cr						<b>✓</b>	
	781	Dynamics of Structures§	3 cr						✓	

\*Writing intensive, †Course may be used to fulfill either area, but may only fulfill one area elective, \$Course has an advanced prerequisite; plan carefully.

Department of Civil and Environmental Engineering University of New Hampshire

# BSCIVE Program Advising Worksheet For Students Entering the Program August 2023 and Later

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Notes: