## **B.S. Environmental Engineering**

Student Information		
Name:	OSU ID:	OSU Admit Term:
Phone:	Email (name.number@osu.edu):	

## **Suggested Curriculum**

This should be used as a guide only. Semester offerings are subject to change.

Year	Autumn	Spring
1	MATH 1151 (Calculus 1)5 hrENGR 1181 (Fundamentals of Engr 1)2 hr _ENGR 1100 (Engineering Survey)1 hr _PHYSICS 1250 (Mechanics, Thermal, Waves)5 hr _GEN Writing and Information Literacy3 hr _GEN Launch Seminar1 hr	MATH 1172 (Engineering Math A) 5 hr ENGR 1182 (Fundamentals of Engr 2) 2 hr CHEM 1210 (Gen Chem 1) 5 hr ENGR 1221¹ (Computer Programming) 2 hr GEN Citizenship Just and Diverse World 4 hr
2	MATH 2177 <sup>2</sup> (Math Topics for Engineers)4 hrMECHENG 2040 <sup>3</sup> (Statics & Mechanics)4 hrCHEM 1220 (Gen Chem 2)5 hrGEN Historical and Cultural Studies3 hr	CIVILEN 2050 <sup>4</sup> (Prob & Data Interpretation) 3 hr        CIVILEN 2090 (Prof Aspects) 1 hr
3	MICRBIO 4000.0x (Microbiology)         4 hr          CIVILEN 3130 (Fluid Mechanics)         3 hr          ENVENG 3200 (Fund Env Engr)         3 hr          Additional Science Elective <sup>6</sup> 4 hr          GEN Social and Behavioral Sciences         3 hr	CIVILEN 2060 (Numerical Analysis Methods) 4 hr CIVILEN 3080 (Econ Eval & Optimization) 3 hr CIVILEN 3160 (Water Resources Engr) 3 hr ENVENG 3210 (Unit Operations) 3 hr GEN Literary, Visual, Performing Arts 3 hr
4	ENVENG 5110 (Biotechnology)       3 hr         ENVENG 4200 (Unit Ops Lab)       1 hr         CHBE 5771 (Air Pollution)       3 hr         Technical Elective       3 hr         Technical Elective       3 hr	ENVENG 4090 (Capstone Design)      3 hr        ENVENG 5170 (Pollution Prev)      3 hr        Technical Elective      3 hr        Technical Elective      3 hr        Thematic Pathways      4 hr

Total Hours to complete the degree program = 130. Please note, <u>course schedules may not follow this plan exactly.</u> This is a reference guide for students. Students should contact their advisor for academic guidance. Courses in BOLD are only offered once per year.

Please contact a CEGE advisor if you have questions or concerns about any of the listed substitutions.

Please note that students who need preparatory work before beginning Math 1151 will need additional time to complete this curriculum. The outlined curriculum is not a prescribed plan and is intended to be used as a guide to assist students in progressing through the curriculum with respect to prerequisite courses. Course offerings are subject to change. Please check the online course bulletin and master schedule for prerequisite requirements & course availability.

<sup>&</sup>lt;sup>1</sup>CSE 1222, 1223, or 1224 are acceptable substitutes for ENGR 1221.

<sup>&</sup>lt;sup>2</sup>MATH 2173+2174 or MATH 2568+2415 are acceptable substitutions for MATH 2177.

<sup>&</sup>lt;sup>3</sup>MECHENG 2010+2020 are acceptable substitutions for MECHENG 2040.

 $<sup>^4</sup>$  STATISTICS 3460 or 3470 are acceptable substitutions for CIVILEN 2050.

<sup>&</sup>lt;sup>5</sup> CHEM 2310 is an acceptable substitution for CHEM 2510.

<sup>&</sup>lt;sup>6</sup>ENR 3000 and 3001, EARTHSC 1121 and 1200, or EARTHSC 11151 and 1200 can be taken as Additional Science Elective

Acceptance C	rite	ria
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Acceptance into the Environmental Engineering major is based on a holistic review of a written application and academic performance. Applications are accepted during Autumn and Spring terms. Only CPHR (cumulative GPA) will be reviewed. Applications can be submitted upon completion of or enrollment in Engineering 1181 and 1182, Math 1151 and 1172, and either Physics 1250, Chemistry 1210 or Chemistry 1250.

<b>Technical and Other electives</b> Students are required to complete 12 hours of technical electives, chosen in consultation with a faculty advisor upon admission to the major. Students must complete six hours of coursework from <i>Area 1</i> , and one course from <i>Area 2</i> . The remaining coursework may come from any Area as outlined on the Technical Elective Guide.						
A 170 1 ' 171 4'		Cr. Hrs				
Area 2 Technical Elective:		Cr. Hrs				
Technical Elective:		Cr. Hrs				
Technical Elective:		Cr. Hrs				
<b>General Education Requirement</b>	its					
Launch Seminar						
GENED 1201	<u>1hr</u>					
Foundations						
Complete all of the following:						
Writing and Information Literacy	3 hr					
Historical and Cultural Studies	3 hr					
Social and Behavioral Sciences	3 hr					
Race, Ethicity, and Gender Diversity	3 hr					
Literary, Visual, and Performing Arts	3 hr					

## Citizenship for a Just and Diverse World 4-6 hr Additional Theme(s) 4-6 hr

Thematic Pathways (8-12 hours)