

The Department of Environmental Engineering Graduation Requirements for Students Enrolled **after 2024**

Items	Items																																																																																										
I. Years of Enrollment : Minimum years of enrollment : 4 years (5 years for Veterinary Medicine) Can be extended for 2 more years (excluding 2 years of suspension)	<table><tr><th>Core Course Title</th><th>Semester /Year</th><th>Credits</th></tr><tr><td>4. Calculus (I)</td><td>Semester</td><td>3</td></tr><tr><td>5. Calculus (II)</td><td>Semester</td><td>3</td></tr><tr><td>6. General Physics</td><td>Year</td><td>4</td></tr><tr><td>7. General Chemistry</td><td>Semester</td><td>3</td></tr><tr><td>8. Environmental Chemistry (I)</td><td>Semester</td><td>2</td></tr><tr><td>9. Environmental Chemistry (II)</td><td>Semester</td><td>2</td></tr><tr><td>10. Microbiology</td><td>Semester</td><td>3</td></tr><tr><td>11. Microbiology Lab</td><td>Semester</td><td>1</td></tr><tr><td>12. Solid Waste</td><td>Semester</td><td>3</td></tr><tr><td>13. Engineering Mathematics (I)</td><td>Semester</td><td>3</td></tr><tr><td>14. Engineering Mathematics (II)</td><td>Semester</td><td>3</td></tr><tr><td>15. Engineering Drawing(I)</td><td>Semester</td><td>1</td></tr><tr><td>16. Engineering Drawing(II)</td><td>Semester</td><td>1</td></tr><tr><td>17. Water Analysis</td><td>Semester</td><td>1</td></tr><tr><td>18. Water Analysis Lab</td><td>Semester</td><td>1</td></tr><tr><td>19. Fluid Mechanics</td><td>Semester</td><td>3</td></tr><tr><td>20. Wastewater Analysis</td><td>Semester</td><td>2</td></tr><tr><td>21. Wastewater Analysis Lab</td><td>Semester</td><td>1</td></tr><tr><td>22. Hazardous Waste Treatment</td><td>Semester</td><td>3</td></tr><tr><td>23. Water Supply Engineering</td><td>Semester</td><td>3</td></tr><tr><td>24. Air Pollution</td><td>Semester</td><td>3</td></tr><tr><td>25. Wastewater Engineering</td><td>Semester</td><td>3</td></tr><tr><td>26. Air Pollution Control Engineering</td><td>Semester</td><td>3</td></tr><tr><td>27. Seminar in Environmental Engineering (I)</td><td>Semester</td><td>1</td></tr><tr><td>28. Seminar in Environmental Engineering (II)</td><td>Semester</td><td>1</td></tr><tr><td>29. Environmental Engineering Unit Operation (I)</td><td>Semester</td><td>1</td></tr><tr><td>30. Environmental Engineering Unit Operation Lab</td><td>Semester</td><td>1</td></tr><tr><td>31. Environmental Engineering Unit Operation (II)</td><td>Semester</td><td>1</td></tr><tr><td>32. Environmental Engineering Unit Operation Lab</td><td>Semester</td><td>1</td></tr></table>	Core Course Title	Semester /Year	Credits	4. Calculus (I)	Semester	3	5. Calculus (II)	Semester	3	6. General Physics	Year	4	7. General Chemistry	Semester	3	8. Environmental Chemistry (I)	Semester	2	9. Environmental Chemistry (II)	Semester	2	10. Microbiology	Semester	3	11. Microbiology Lab	Semester	1	12. Solid Waste	Semester	3	13. Engineering Mathematics (I)	Semester	3	14. Engineering Mathematics (II)	Semester	3	15. Engineering Drawing(I)	Semester	1	16. Engineering Drawing(II)	Semester	1	17. Water Analysis	Semester	1	18. Water Analysis Lab	Semester	1	19. Fluid Mechanics	Semester	3	20. Wastewater Analysis	Semester	2	21. Wastewater Analysis Lab	Semester	1	22. Hazardous Waste Treatment	Semester	3	23. Water Supply Engineering	Semester	3	24. Air Pollution	Semester	3	25. Wastewater Engineering	Semester	3	26. Air Pollution Control Engineering	Semester	3	27. Seminar in Environmental Engineering (I)	Semester	1	28. Seminar in Environmental Engineering (II)	Semester	1	29. Environmental Engineering Unit Operation (I)	Semester	1	30. Environmental Engineering Unit Operation Lab	Semester	1	31. Environmental Engineering Unit Operation (II)	Semester	1	32. Environmental Engineering Unit Operation Lab	Semester	1
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II. Minimum graduation credits required: <u>134</u> credits																																																																																											
III. Courses required by the university curriculum: 1. Physical Education: <u>2</u> credits, not included in the credits for graduation. Extra taken PE course credits will be counted as from other departments, and are limited to a maximum of 2 credits. Athletes with outstanding sports achievements will be handled according to the relevant regulations of the Office of Physical Education and Sports. 2. English Proficiency Requirement: 0 credit. 3. General Education : 28 credits i. Core Competencies: at least 3 credits. International students do not need to take the “Information Literacy” course. ii. Language Competencies: (at least 8 credits) ➢ College Chinese: 4 credits ➢ Foreign Language: at least 4 credits and at most 6 credits. iii. Domain Competencies: at least 10 credits ➢ Humanistic Domain, Social Science Domain, and Natural Domain: at least one course in each Domain, total at least <u>6</u> credits. ➢ Integrated Domain: at least 4 credits. ➢ For National Defense education courses, only credits of 1 course can be counted as general education credits. ➢ Our program belongs to the area of <u>Environmental Science</u> , therefore, only one course from this area will be recognized. IV. Extra credits ☐ can ☒ can't be counted in the graduation credits.																																																																																											
IV. Courses required by college curriculum: <u> </u> credits <table><tr><th>Course Title</th><th>Semester /Year</th><th>Credits</th></tr><tr><td>1.</td><td></td><td></td></tr><tr><td>2.</td><td></td><td></td></tr></table>	Course Title	Semester /Year	Credits	1.			2.																																																																																				
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V. Required professional courses by the department: <u>68</u> credits. <table><tr><th>Core Course Title</th><th>Semester /Year</th><th>Credits</th></tr><tr><td>1. Introduction to Environmental Science</td><td>Semester</td><td>3</td></tr><tr><td>2. Introduction to Environmental Engineering</td><td>Semester</td><td>1</td></tr><tr><td>3. Introduction to Computer Science</td><td>Semester</td><td>3</td></tr></table>	Core Course Title	Semester /Year	Credits	1. Introduction to Environmental Science	Semester	3	2. Introduction to Environmental Engineering	Semester	1	3. Introduction to Computer Science	Semester	3	VI. Minimum of professional elective credits: <u>32</u> credits																																																																														
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VII. Other Regulations:

VIII. Minor Degree: If a student intends to study for a minor degree, he/she will need to take 20 (or more) credits in addition to the department's minimum credits required for graduation. For more details, please see the bulletin of Curriculum Division website.

IX. Double Major: The graduation requirements for students in pursuit of a double major (department or degree program) shall be based on the relevant regulations applicable at the time (year) when the application was approved. Double major students not only have to fulfill all graduation credit requirements of their original major (department or degree program), they must also complete all core courses for the second major (department or degree program) in order to be granted a double major degree.

Undergraduate students who did not complete or are short of 40 credits for the second major must make up for those credits by taking courses designated by the second-major department or degree program.

X. Cross-Disciplinary Expertise Development Program: For students whose compulsory courses and credits are the same as the ones offered by the departments (degree programs), double major, minor, or other cross-disciplinary expertise programs providing cross-disciplinary expertise courses, they shall take other elective courses that are related to their expertise and designated by the departments (degree programs) or colleges providing cross-disciplinary expertise module courses.

XI. Students who graduate from the study period of the senior high school less than 6 years will be required to take at least 12 extra credits in their graduation requirements.

2024/5/6

Coordinator 系(所、學位學程)承辦人：

助教 吳麗芬

Chairperson 系所主管簽

環境工程學系系主任 林伯雄