

WATER TECHNOLOGY - ASSOCIATE OF APPLIED SCIENCE

Doña Ana Community College 2024-2025 Catalog (67-68 credits)

NOTE: Students must earn a final grade of C- or better in all required WATR courses/Technical Requirements and achieve a cumulative grade-point average of at least 2.0. A grade of C- or better is required in ENGL 1110G Composition I and designated Mathematics courses.

Students must complete all University degree requirements, which include: General Education requirements and elective credits to total at least 67 credits (67-68 of credits listed for degree). Developmental coursework will not count towards the degree requirements and/or elective credits, but may be needed in order to take the necessary English and Mathematics coursework.

| Prefix | Title | Credits |
|---|---|---------|
| General Education | | |
| <i>Select one course from four of the following six content areas for a total of 12-14 credits</i> ^{1,2} | | 12-14 |
| This degree requires courses from Area I; students must select three courses from the remaining areas to complete General Education requirements. | | |
| Area I: Communication | | |
| ENGL 1110G | Composition I ³ | |
| Area II: Mathematics | | |
| Area III: Laboratory Sciences ^{2,3} | | |
| Area IV: Social/Behavioral Sciences ^{2,3} | | |
| Area V: Humanities ^{2,3} | | |
| Area VI: Creative and Fine Arts ^{2,3} | | |
| General Education Elective | | |
| COMM 1115G or COMM 1130G | Introduction to Communication ³ Public Speaking | 3 |
| Major Requirements | | |
| Technical Requirements | | |
| WATR 120 | Introduction to Water Systems | 3 |
| WATR 130 | Wastewater Collection and Basic Treatment Systems | 3 |
| WATR 140 | Applied Water and Wastewater Math I | 3 |
| WATR 160 | Systems Maintenance | 4 |
| WATR 175 | Programmable Logic Controllers | 2 |
| WATR 182 | Water Chemistry Analysis | 1 |
| WATR 190 | Water and Wastewater Microbiology | 3 |
| WATR 192 | Water and Wastewater Microbiological Analysis | 1 |
| WATR 200 | Internship | 3 |
| WATR 220 | Water Treatment Systems | 3 |
| WATR 222 | Water Systems Operation | 1 |
| WATR 230 | Advanced Wastewater Treatment | 4 |
| WATR 232 | Wastewater Systems Operations | 1 |
| WATR 240 | Advanced Water and Wastewater Math II | 3 |
| WATR 250 | Municipal Systems Management | 4 |

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|--------------------------------|--|--------------|
| WATR 275 | Certification Review | 3 |
| Choose one from the following: | | 3 |
| WATR 180 | Water Chemistry | |
| CHEM 1111 | Basic Chemistry ³ | |
| CHEM 1120G | Introduction to Chemistry Lecture and Laboratory (non majors) ³ | |
| CHEM 1215G | General Chemistry I Lecture and Laboratory for STEM Majors (or any higher level CHEM course of 3 or more credits) ³ | |
| Select one from the following: | | 6 |
| WATR 285 & WATR 287 | High Purity Water Treatment Systems and Advanced Water Chemistry Analysis | |
| WATR 290 & WATR 292 | Advanced Wastewater Microbiology and Chemistry and Advanced Wastewater Analysis | |
| Total Credits | | 67-68 |

- ¹ Each course selected must be from a different area and students cannot take multiple courses in the same area.
- ² See the General Education (<https://catalogs.nmsu.edu/dona-ana/general-education-and-transfer-options/transfer-new-mexico-institutions/>) section of the catalog for a full list of courses.
- ³ Courses are identical to those offered at New Mexico State University Las Cruces (main) Campus.

(67-70 credits)

A Suggested Plan of Study

The contents of this roadmap may vary depending on initial student placement in mathematics and English. This is only a suggested plan of study for students, and is not intended as a contract. Individual student academic plans may vary. Please contact your academic advisor to create a plan that works for you. Course availability may vary from fall to spring semester and may be subject to modification or change.

NOTE: Students must receive a final grade of C- or better in all required WATR courses/Technical Requirements and achieve a cumulative grade-point average of at least 2.0. A grade of C- or better is required in ENGL 1110G Composition I and designated Mathematics courses.

Students must complete all University degree requirements, which include: General Education requirements and elective credits to total at least 67 credits (67-70 of credits listed for degree). Developmental coursework will not count towards the degree requirements and/or elective credits, but may be needed in order to take the necessary English and Mathematics coursework.

| Semester 1 | | Credits |
|-------------------|---|----------------|
| WATR 120 | Introduction to Water Systems | 3 |
| WATR 130 | Wastewater Collection and Basic Treatment Systems | 3 |
| WATR 140 | Applied Water and Wastewater Math I | 3 |
| WATR 160 | Systems Maintenance | 4 |
| WATR 180 | Water Chemistry | 3 |
| CHEM 1111 | Basic Chemistry | |
| CHEM 1120G | Introduction to Chemistry Lecture and Laboratory (non majors) | |
| CHEM 1215G | General Chemistry I Lecture and Laboratory for STEM Majors (or any higher level CHEM course of 3 or more credits) | |

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|---|---|--------------|
| WATR 182 | Water Chemistry Analysis | 1 |
| Credits | | 17 |
| Semester 2 | | |
| Area I: Communications – English Composition Level 1 | | 4 |
| ENGL 1110G | Composition I | |
| Select one course from different NM General Education Areas III, IV, V, and VI. A total of 3 courses from different areas are required. | | 3-4 |
| Area III: Laboratory Sciences | | |
| Area IV: Social/Behavioral Sciences | | |
| Area V: Humanities | | |
| Area VI: Creative and Fine Arts | | |
| WATR 175 | Programmable Logic Controllers | 2 |
| WATR 190 | Water and Wastewater Microbiology | 3 |
| WATR 192 | Water and Wastewater Microbiological Analysis | 1 |
| WATR 220 | Water Treatment Systems | 3 |
| WATR 222 | Water Systems Operation | 1 |
| Credits | | 17-18 |
| Semester 3 | | |
| WATR 200 | Internship (3-5 credits) | 3 |
| Credits | | 3 |
| Semester 4 | | |
| General Education Elective – Area I: Communications - Oral Communications | | 3 |
| COMM 1115G | Introduction to Communication | |
| WATR 230 | Advanced Wastewater Treatment | 4 |
| WATR 232 | Wastewater Systems Operations | 1 |
| WATR 240 | Advanced Water and Wastewater Math II | 3 |
| Choose one from the following: | | 6 |
| WATR 285 & WATR 287 | High Purity Water Treatment Systems and Advanced Water Chemistry Analysis | |
| WATR 290 & WATR 292 | Advanced Wastewater Microbiology and Chemistry and Advanced Wastewater Analysis | |
| Credits | | 17 |
| Semester 5 | | |
| Select one course from different NM General Education Areas III, IV, V, and VI. A total of 3 courses from different areas are required. | | 3-4 |
| Select one course from different NM General Education Areas III, IV, V, and VI. A total of 3 courses from different areas are required. | | 3-4 |
| WATR 250 | Municipal Systems Management | 4 |
| WATR 275 | Certification Review | 3 |
| Credits | | 13-15 |
| Total Credits | | 67-70 |