

CERTIFICATE OF UNDERGRADUATE STUDY IN WATER RESOURCES ENGINEERING

The Certificate of Undergraduate Study (CUGS) in Water Resources Engineering offers students an opportunity to obtain additional specialized coursework related to the field of Water Resources Engineering beyond that allowed by the 120 credit undergraduate program in Civil Engineering.

The coursework is designed to facilitate immediate transference to Water Resources Engineering applications in the United States.



Water Resources Engineering CUGS Courses

Complete Two Courses from the Following List:

CEE 08441	Surface Hydrology	3 Credits
CEE 08442	Hydrometeorology	3 Credits
CEE 08443	Advanced Water Resources Engineering for Seniors	3 Credits
CEE 08444	Principles of Hydraulic Design	3 Credits
CEE 08445	Principles of Environmental Fluid Mechanics	3 Credits
CEE 08446	River Engineering Principles	3 Credits
CEE 08447	Watershed Engineering Principles	3 Credits
CEE 08448	Introduction to Water and Environmental Monitoring	3 Credits

Complete Two Courses from the Following List:

GEOG 16260	Fundamentals of Geographic Information Systems	3 Credits
GEOG 16338	Climatology	3 Credits
GEOG 16360	Applications of Geographic Information Systems	3 Credits
GEOG 16370	Drones, Planes and Satellites	3 Credits
GEOG 16371	Remote Sensing II	3 Credits
GEOG 16375	Remote Sensing of the Environment	3 Credits
PLAN 31280	Foundations of Planning and Environmental Design	3 Credits
PLAN 31384	Water Resources Planning	3 Credits
EVSC 01380	Principles of Atmospheric and Climate Science	3 Credits
EVSC 01425	The Shaping of Earth Systems	3 Credits

* Two prerequisite courses, GEOG 16160 Introduction to Mapping and Geographic Information Systems, and CEE 08342 Water Resources Engineering, are required before students can declare this CUGS.

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Two prerequisite courses, GEOG 16160 Introduction to Mapping and Geographic Information Systems, and CEE 08342 Water Resources Engineering, are required before students can declare this CUGS.

Students will complete two courses (6 s.h.) from the following list of Water Resources Engineering electives:

	Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
<input type="radio"/>	CEE 08441	Surface Hydrology				3
<input type="radio"/>	CEE 08442	Hydrometeorology				3
<input type="radio"/>	CEE 08443	Advanced Water Resources Engineering for Seniors				3
<input type="radio"/>	CEE 08444	Principles of Hydraulic Design				3
<input type="radio"/>	CEE 08445	Principles of Environmental Fluid Mechanics				3
<input type="radio"/>	CEE 08446	River Engineering Principles				3
<input type="radio"/>	CEE 08447	Watershed Engineering Principles				3
<input type="radio"/>	CEE 08448	Introduction to Water and Environmental Monitoring				3

Students will complete two courses (6 s.h.) from the following list

	Course #	Course Name	Course Attributes / Notes	Sem/Yr	Grade	Credits
<input type="radio"/>	GEOG16.260	Fundamentals of Geographic Information System				3
<input type="radio"/>	GEOG16.338	Climatology				3
<input type="radio"/>	GEOG 16360	Applications of Geographic Information Systems				3
<input type="radio"/>	GEOG 16370	Drones, Planes and Satellites				3
<input type="radio"/>	GEOG 16371	Remote Sensing II				3
<input type="radio"/>	GEOG 16375	Remote Sensing of the Environment				3
<input type="radio"/>	PLAN 31280	Foundations of Planning and Environmental Design				3
<input type="radio"/>	PLAN31.384	Water Resources Planning				3
<input type="radio"/>	EVSC 01380	Principles of Atmospheric and Climate Science				3
<input type="radio"/>	EVSC 01425	The Shaping of Earth Systems				3
total: 12 sh						