

# Hydrologic Studies

*Associate of Applied Science in Hydrologic Studies*



For More Information, Contact:  
**The Industrial Technology Division at  
GateWay Community College**

**Phone (602) 286-8613**

<http://www.gatewaycc.edu/Environment/>



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**Welcome to the Hydrologic Studies Program  
at GateWay Community College**

If you have any questions about the enclosed program material, please feel free to contact any of the following program contacts:

**Mario Castaneda**, Water Resources Technology, Program Director  
Phone (602) 286-8663 Email: [castaneda@gatewaycc.edu](mailto:castaneda@gatewaycc.edu)

**Industrial Technology Advisement Office**  
Phone (602) 286-8613 Email: [industrialtech@gatewaycc.edu](mailto:industrialtech@gatewaycc.edu)

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## Registration Checklist

1	<b>Submit 'Student Information Form'</b> <a href="http://www.my.maricopa.edu">www.my.maricopa.edu</a>	South Building, A&R Office Room SO1146	602.286.8200
2	<b>Request Official Transcripts from all other educational agencies to be forwarded to Admissions &amp; Records</b>	South Building, A&R Office Room SO1146	602.286.8200
3	<b>Take Course Placement Test</b> Some courses and programs require test scores prior to enrollment. No fee required_BRING PICTURE ID_Call for times	South Building, Testing Center Room SO1136	602.286.8160
4	<b>Apply for Financial Aid and Scholarships, if interested</b> <a href="http://enroll.gatewaycc.edu/FinancialAid/ApplyForFinancialAid/">http://enroll.gatewaycc.edu/FinancialAid/ApplyForFinancialAid/</a> <a href="http://enroll.gatewaycc.edu/FinancialAid/Scholarships/">http://enroll.gatewaycc.edu/FinancialAid/Scholarships/</a>	South Building, Financial Aid Room SO118	602.286.8300
5	<b>Meet with an Industrial Technology Program Advisor</b> Explore your program options, obtain registration advisement and setup a program of study plan.	South Building, Industrial Tech Room SO1300	602.286.8613
6	<b>Register for Courses</b> Schedule Available at <a href="http://www.gatewaycc.com">www.gatewaycc.com</a> Enroll online at <a href="http://www.my.maricopa.edu">www.my.maricopa.edu</a>	South Building, A&R Office Room SO1146	602.286.8200
7	<b>Pay Tuition and Fees</b> Payment Plans and Payment Extensions Available. Ask for Details.	South Building, Cashiers Office Room SO1107	602.286.8277
8	<b>Obtain Student ID, Optional</b> Student Life_BRING PICTURE ID	Main Building, Student Life Room MA1132	602.286.8141
9	<b>Obtain Parking Decal, Required</b> Required if parking a vehicle on campus	South Building, A&R Office Room SO1146	602.286.8200
10	<b>Purchase Books</b> Bookstore or online at <a href="http://www.efollet.com">www.efollet.com</a>	Main Building, Bookstore Room MA1200	602.286.8400

## Hydrologic Studies

### Career Description

A love of nature, passion for the environment and concern for how precious water resources are monitored and maintained are just some of the characteristics of Hydrologic Technicians. Managing water in lakes, rivers, and oceans, among others, requires dedication and skill. Ignorance in the care and maintenance of these water sources can lead to much larger repercussions, making Hydrologic Technicians vital to the health and sustainability of water resources.

One great aspect of a career as a Hydrologic Technician is that in order to monitor water, you have to be where the water is! This means many professionals spend most of their time working outside in the field, and not a lot of time sitting behind a desk or in a cramped cubicle.

Hydrologic Technicians primary job duties are to monitor the quality and quantity of surface and ground water, take samples and flow measurements, install gauges and survey cross sections of water ways. Data is then recorded and analyzed to determine if the water meets national and state standards, and for historical records.



### How To Get Started

GateWay is the only college in the state of Arizona to offer an Associate in Applied Science degree in Hydrologic Studies. Our program has been utilized by the US Geological Survey as a national feeder school for hydrologic technicians. Our program provides the field experience needed for success in this industry and also the communication skills required to deliver written and oral reports to the general public.

### Employment Outlook

With ever-increasing population and a constant struggle to preserve quantity and quality of water, particularly in the Southwest of the United States, careers in hydrology are in demand nationwide. In Arizona, Hydrologic Technician positions are expected to increase 10% or more in the next 10 years. Hydrologic Technicians earn an average of \$15.20 to \$42.97 an hour for an average salary of \$31,610 to \$85,940 a year.

### Program Costs

Tuition and fees are set by the Maricopa Community College District Governing Board. Tuition is based on the 2008-2009 tuition rate of \$71 per credit hour (for in-country students). Tuition and fees are subject to change. Additional fees may apply. Financial Aid and Child Care are available to those who qualify.

### Accreditation

GateWay Community College is a Maricopa Community College, accredited by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools (30 North LaSalle Street, Suite 2400, Chicago, IL 60602-2504. Phone (800) 621-7440)

Associate in Applied Science (AAS) in Hydrologic Studies

Course Pre-Fix	Course Name	Credits	Advisor Notes
OSH106	Industrial Safety	2	
WRT100+ or WRT101+	Introduction to Hydrology (100) or Introduction to Hydrology Field Experience (101)	3-4	
WRT112	Surface Water Records Computation	1.5	
WRT117	Geographic Information Systems (GIS)	3	
WRT120+	Hydrologic Instrumentation	3	
WRT125+	Surveying for Water Resources	4	
WRT130+	Groundwater Hydrology	3	
WRT138+	Groundwater Field Techniques	1	
WRT150+	Introduction to Surface Water Data Collection	3	
WRT158+	Introduction to Surface Water Data Collection Field Tech- niques	2	
WRT240+	Water Quality	3	
WRT248+	Water Quality Field Techniques	1	
WRT250+	Surface Water Hydrology	3	
WRT258+	Surface Water Field Techniques	1	
WRT260+	Field Hydrology: Groundwater, Surface Water and Water Quality	3	
WRT270AA+	Water Resources Internship	1	
WRT270AB+	Water Resources Internship	2	
WRT270AC+	Water Resources Internship	3	
Computer Competency: <i>(Any combination for a total of 3 credits: BPC110, BPC114AE, BPC117AM, BPC118AB, BPC130DK+, CIS133AA)</i>		3	
CHM130/CHM130LL+	Fundamental Chemistry (3) and Lab (1)	4	
COM110 or COM230	Interpersonal Communication (110) or Small Group Communication (230)	3	
CRE101 or CRE111+ or Equivalent	Critical Reading or Critical Reading for Business and Industry or Equivalent by Assessment	3	
ENG101+	First-Year Composition	3	
ENG102+ or ENG111+	First-Year Composition or Technical Writing	3	
MAT120+ or MAT121+ or MAT122+	Intermediate Algebra or Equivalent by Assessment	3-5	
Humanities/Fine Arts <i>(course must be on the approved list of course to meet the AAS degree in General Education Requirements)</i>		3	
Social/Behavioral Science <i>(course must be on the approved list of course to meet the AAS degree in General Education Requirements)</i>		3	
<b>Total Required Credits for Associate in Applied Science</b>		<b>73.5-76.5</b>	

**To receive this degree, students must earn a grade 'C' or better in all courses within the program.**

**Program of Study/Suggested Course Sequence  
for  
Hydrologic Studies Associates Degree Program**

**FALL START**

<b>1st Semester, Fall</b>				
<b>Course</b>	<b>Credit</b>	<b>Tuition</b>	<b>Course Fees</b>	<b>Book</b>
OSH 106	2	\$142	\$25	Yes
WRT100 or WRT101	3/4	\$213/\$284	\$25	Yes
WRT150 & WRT158	5	\$355	\$50	No
MAT120	3	\$213	-	Yes
General Studies/ Required Core Classes	<i>Required general education core classes can be taken at any other MCCD Colleges at your convenience (summer, online and Saturday classes are available)</i>			
<b>2nd Semester, Spring</b>				
<b>Course</b>	<b>Credit</b>	<b>Tuition</b>	<b>Course Fees</b>	<b>Book</b>
WRT112	1.5	\$107	\$25	No
WRT130 & WRT138	4	\$284	\$50	Yes
WRT117	3	\$213	\$25	Yes
CHM130 & CHM130LL	4	\$284	-	Yes
General Studies/ Required Core Classes	<i>Required general education core classes can be taken at any other MCCD Colleges at your convenience (summer, online and Saturday classes are available)</i>			
<b>3rd Semester, Summer</b>				
<b>Course</b>	<b>Credit</b>	<b>Tuition</b>	<b>Course Fees</b>	<b>Book</b>
WRT270AA, AB, AC	6	\$426	-	-
<b>4th Semester, Fall</b>				
<b>Course</b>	<b>Credit</b>	<b>Tuition</b>	<b>Course Fees</b>	<b>Book</b>
WRT120	3	\$213	\$25	Yes
WRT125	4	\$284	\$25	Yes
WRT240 & WRT248	4	\$284	\$50	Yes
WRT250 & WRT258	5	\$355	\$50	Yes
General Studies/ Required Core Classes	<i>Required general education core classes can be taken at any other MCCD Colleges at your convenience (summer, online and Saturday classes are available)</i>			
<b>5th Semester, Spring</b>				
<b>Course</b>	<b>Credit</b>	<b>Tuition</b>	<b>Course Fees</b>	<b>Book</b>
WRT260	3	\$213	\$25	Yes
General Studies/ Required Core Classes	<i>Required general education core classes can be taken at any other MCCD Colleges at your convenience (summer, online and Saturday classes are available)</i>			

## Individual Education Plan

<b>Placement Test</b>		
Math:	Reading:	English:

Semester _____		Year _____	
Course	Credit	Complete/ Grade	

Semester _____		Year _____	
Course	Credit	Complete/ Grade	

Semester _____		Year _____	
Course	Credit	Complete/ Grade	

Semester _____		Year _____	
Course	Credit	Complete/ Grade	

Semester _____		Year _____	
Course	Credit	Complete/ Grade	

Semester _____		Year _____	
Course	Credit	Complete/ Grade	

## PROGRAM COSTS

### Hydrologic Studies Degree Cost Estimates

Program	Tuition	Course Fees	Total
Associate of Applied Science in Hydrologic Studies	\$5,290	\$475	\$5,765

*Please note that these are only estimates and do not include books. These estimates may change based on increases to tuition, course fees and book costs. Estimates are based on the 2008-2009 tuition rates for in-county students. Additional fees may apply.*

## COLLEGE CONTACT INFORMATION

Admissions, Registration and Records.....	(602) 286-8200
Adult Re-Entry.....	(602) 286-8900
Apprenticeship Programs.....	(602) 286-8681
Assessment/Testing Center.....	(602) 286-8160
Bookstore.....	(602) 286-8400
Cafeteria.....	(602) 286-8308
Career and Employment Services Center.....	(602) 286-8500
College Safety.....	(602) 286-8911
Cashier's Office.....	(602) 286-8277
Cashier's TIP Hotline.....	(602) 286-8286
Children's Learning Center.....	(602) 286-8130
College Information.....	(602) 286-8000
Counseling.....	(602) 286-8900
Disability Services.....	(602) 286-8888
Financial Aid.....	(602) 286-8300
Institute for Computer Training (ICT) Lab.....	(602) 286-8568
Learning Center.....	(602) 286-8800
Library.....	(602) 286-8454
Phone Registration.....	(602) 286-8100
Student Activities/Clubs.....	(602) 286-8700
Veterans Services.....	(602) 286-8076