

ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS)

This degree prepares students for a lucrative career in the water treatment field. Students learn to maintain and operate water management plants that treat water supplies for urban areas. Classes are generally held at the Clark County Sanitation District. Academic skills emphasizing related math, science and human relations components are stressed to prepare students to meet challenges common in the workplace.

STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:

- Demonstrate an understanding of the fundamentals of water treatment and related technologies.
- Demonstrate an understanding of the laws and regulations that apply to drinking water treatment.
- Demonstrate an understanding of the various treatment methodologies and technologies applicable to drinking water treatment.
- Demonstrate an understanding of pump operation and maintenance for drinking water treatment operation.
- Demonstrate knowledge of water treatment operations, communication skills, and other core degree requirements adequate to assume entry level supervisory positions in water treatment operations.

GENERAL EDUCATION REQUIREMENTS (25 Credits):

	CR	SEMESTER
COMMUNICATIONS: BUS 108, COM 101, 102, 215, ENG 100, 101, 102, 107, 113, 114, 205, JOUR 102, THTR 105	3-5	_____
ENGLISH: ENG 100, 101, 107, 113	3-5	_____
HUMAN RELATIONS: ALS 101, ANTH 101, 112, 201, 205, HIST 105, 106, 107, 150, 151, 210, 247, 260, HMS 130, 135B, 265B, MGT 100B, 283, PHIL 135, PSC 201, PSY 101, 102, 207, 208, 261, SOC	3	_____
MATHEMATICS: MATH 120 or above (except MATH 122, 123)	3	_____
SCIENCE: AST, BIOL, CHEM, EGG 131, 132, ENV, GEOG 103, 104, 117, GEOL, HHP 123B, 124B, PHYS	6	_____
FINE ARTS/HUMANITIES/ SOCIAL SCIENCES: AM, ANTH, ART, COM, ECON, ENG 223 or above, GEOG 106 or above, HIST, International Languages, Music, PHIL, PSC, PSY, SOC, THTR, WMST 113	3	_____
U.S. AND NEVADA CONSTITUTIONS: PSC 101 or HIST 101 and HIST 102 or HIST 101 and HIST 217	4-6	_____

tSPECIAL PROGRAM REQUIREMENTS (35 Credits):

	CR	SEMESTER
ESH 202 Environmental Laws and Regulations	3	_____
ESH 215 Environmental Computer Applications	3	_____
or		
GIS 109B Introduction to GIS		
ESH 243B Water Treatment Plant Operations I	3	_____
ESH 244B Water Distribution I	3	_____
ESH 245B Water Treatment Plant Operations II	3	_____
ESH 246B Water/Wastewater Mathematics I	3	_____
ESH 247B Water/Wastewater Mathematics II	3	_____
ESH 248B Water Quality Analysis and Laboratory	4	_____
ESH 250B Pump Operation and Maintenance	3	_____
ESH 251B Current Issues	3	_____
Plus 4 credits from the following:		
BIOL 101 General Biology for Non-Majors	4	_____
CHEM 105 Chemistry, Man and Society	3	_____
CHEM 110 Chemistry for Health Sciences I	4	_____
CHEM 111 Chemistry for Health Sciences II	4	_____
CHEM 121 General Chemistry I	4	_____
CONS 120B Printreading and Specifications	3	_____
EMS 108B Emergency Medical Technician Training	8	_____
ENV 220 Introduction to Ecological Principles	3	_____
ESH 225B Ethics and Legal Issues in Environmental Restoration	3	_____
ESH 230B Radiation Health Physics	3	_____
ESH 235B Asbestos Inspection and Abatement	3	_____
ESH 249B Industrial Pretreatment Programs and Inspection	3	_____
ET 100B Survey of Electronics	3	_____
FT 101 Introduction to Fire Science	3	_____
MT 110B Material Science I (Ferrous and Non-Ferrous)	4	_____

ASSOCIATE OF APPLIED SCIENCE

60 Total Credits

NOTE: Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree. ESHWAT-AAS

Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.



Guided Pathway 2014-2015
AAS ENVIRONMENTAL SAFETY AND HEALTH
WATER TREATMENT
 60 Credits

First Semester Fall		<i>Credits</i>		<i>Completed</i>
ENG 100, 101, 107, or 113		3		_____
	Prerequisite: English Placement Test			_____
ESH 130	Intro to Hazardous Materials Management	3	<i>Fall Only</i>	_____
ESH 243B	Water Treatment Plant Operation I	3	<i>Fall Only</i>	_____
MATH 120	Fundamentals of College Mathematics	3		_____
	Prerequisite: Math Placement Test			_____
Total		12		

Second Semester		<i>Credits</i>		
ENG 107	Technical Communication I	3		_____
ESH 202	Environmental Laws and Regulations	3	<i>Spring Only</i>	_____
ESH 245B	Water Treatment Plant Operation II	3	<i>Spring Only</i>	_____
	Prerequisite: ESH 243B			_____
ESH 246B	Water/Wastewater Mathematics I	3	<i>Spring Only</i>	_____
	Prerequisite: ESH 240B or 243B			_____
Science Requirement (choose one)		3		_____
Total		15		

Summer Semester		<i>Credits</i>		
ESH 250	Pump Operation and Maintenance	3	<i>Summer Only</i>	_____
ESH 251	Current Issues	3	<i>Summer Only</i>	_____
Total		6		

Third Semester		<i>Credits</i>		
ESH 244B	Water Distribution	3	<i>Fall Only</i>	_____
ESH 247B	Water/Wastewater Mathematics II	3	<i>Fall Only</i>	_____
	Prerequisite: ESH 246B			_____
ESH 248B	Water Quality Analysis and Laboratory	4	<i>Fall Only</i>	_____
	Prerequisite: ESH 241B, and 246B			_____
Science Requirement (choose one)		3		_____
Total		13		

Fourth Semester		<i>Credits</i>		
ESH Elective (choose 4 credits)		4		_____
Fine Arts/Humanities/Soc Sc Requirement (choose one)		3		_____
Human Relations Requirement (choose one)		3		_____
PSC 101	Introduction to American Politics	4		_____
Total		14		