

# ENVIRONMENTAL TECHNOLOGY

Environmental Technology is a career field that utilizes the principles of science, engineering and computer technology to protect and enhance the environment and human health. This program emphasizes the application of environmental sciences through the use of technology, hands-on research projects and field activities



## Program Skills & Certifications:

- Natural resources management
- Water, land, and air systems
- Environmental sampling and analysis
- Pollution prevention and control
- Geographic Information Systems (GIS)
- Create and interpret maps, site sketches, and blueprints
- Operate, calibrate, and maintain lab and field equipment
- Design experiments, collect and analyze data
- Maintain accurate records
- Quality control/quality assurance
- Prepare reports and presentations using computer software (Word, Excel, PowerPoint, ArcGIS)
- Communicate orally and in writing with peers, teachers and professionals in field
- Student projects include construction and maintenance of an aquaculture system, wetland creation and management, habitat assessment, landscaping, native plant horticulture, soil & water quality monitoring, and mapping environmental data using sophisticated software
- During their senior year, students who qualify are encouraged to undertake a school-to-work transition experience such as an internship or work study position

## Internships:

During their senior year, students have the option of completing a Capstone Work Study course for three credits as they work in the many fields of Environmental Technology. Program Advisory Committee (PAC) members and other industry partners provide supervised work-based learning experiences for all students who demonstrate performance of the competencies necessary to enter this phase of the program. Supervised, work-based learning experiences are required of all students demonstrating readiness to participate. For the few who do not participate, alternative capstone experiences will be provided (i.e., in school work experiences, a culminating project, or another experience comparable in rigor. Examples of prior work study locations include: the Center for Marine Biotechnology, Patapsco State Park, Baltimore County's Department of Environmental Planning and Resource Management, and Maryland Department of Natural Resources. The work-study experience is adapted toward a student's specific area of interest within Environmental Technology.

## Articulation with CCBC:

Students may have the opportunity to earn up to 3 articulated credits for GIS Applications

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Content Area	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
English	English 9	English 10	English 11	English 12
Math	Algebra I	Algebra II	Geometry	College Readiness Math or Trig with Algebra
	Honors Algebra II	Honors Geometry	Pre Calculus or Trig/Analyt	AP Calculus I/II or College Algebra
	Honors Algebra II and Honors Geometry or G & T Geometry	Precalculus or Trig/Analyt	AP Calculus I/II or College Algebra	AP Calculus II or AP Statistics
Science	Biology	Chemistry	Physics or Earth Science	Science Elective
Social Studies	American Government	World History	US History	EPI (.5 cr)
Graduation Requirements	Introduction to Engineering & Technology Concepts (IETC) (1 cr)	Fine Arts	Health (.5 cr)	Capstone Work Experience  Environmental Technology III CWE (4 cr)  or Program Electives
Completer Classes	Environmental Technology I (1 cr)	Environmental Technology 2 (1 cr)  Geographic Info Systems (.5 cr)	Environmental Technology 3 (1 cr)  Environmental Technology 4 (1 cr)	
Requirements/ Electives	Physical Education	Technical Writing (.5)	Foreign Lang. or Elective	

See page 32 for admission criteria!