

BS in Civil Engineering Technology Curriculum Map

Courses and Activities Mapped to BS in Civil Engineering Technology Outcome Set

<p>1: Apply the latest technology and engineering tools to solve technical problems</p> <p>Apply the latest technology and engineering tools to solve technical problems in the practice of Civil engineering technology and related interdisciplinary fields.</p>					<p>2: Remain technically current and adapt to rapidly changing technologies</p> <p>Remain technically current and adapt to rapidly changing technologies through self improvement with continuous learning or post-graduate education.</p>		<p>3: Demonstrate independent thinking, self-management, and effective functioning</p> <p>Demonstrate independent thinking, self-management, and functioning effectively in team-oriented and open-ended activities in an industrial environment.</p>	<p>4: Communicate effectively in oral, written, and graphical forms.</p> <p>Communicate effectively in oral, written, and graphical forms.</p>	<p>5: Perform ethically and professionally in business, industry, and society.</p> <p>Perform ethically and professionally in business, industry, and society.</p>	<p>6: Develop leadership skills and responsibility in their chosen career field.</p> <p>Develop leadership skills and responsibility in their chosen career field.</p>	<p>7: Understand global issues and the impact of technology and engineering</p> <p>Understand global issues and the impact of technology and engineering solutions on the society and environment.</p>
<p>1.1: an appropriate mastery of the knowledge, techniques, skills, and modern tools of the CVET discipline</p> <p>an appropriate mastery of the knowledge, techniques, skills, and modern tools of the CVET discipline</p>	<p>1.2: ability to apply current knowledge and adapt to emerging applications</p> <p>an ability to apply current knowledge and adapt to emerging applications of mathematics, science, engineering, and technology.</p>	<p>1.3: an ability to conduct, analyze and interpret experimental results to improve processes.</p> <p>an ability to conduct, analyze and interpret experiments, and apply experimental results to improve processes.</p>	<p>1.4: an ability to apply creativity in the design of systems, components, or processes</p> <p>an ability to apply creativity in the design of systems, components, or processes appropriate to the CVET program educational objective.</p>	<p>1.5: an ability to identify, analyze and solve technical (close-ended analysis and open-ended design) problems.</p> <p>an ability to identify, analyze and solve technical (close-ended analysis and open-ended design) problems.</p>	<p>2.1: a recognition of the need for, and an ability to engage in lifelong learning.</p> <p>a recognition of the need for, and an ability to engage in lifelong learning.</p>	<p>2.2: a commitment to quality, timeliness, and continuous improvement.</p> <p>a commitment to quality, timeliness, and continuous improvement.</p>	<p>3.1: an ability to function effectively on teams.</p> <p>an ability to function effectively on teams.</p>	<p>4.1: an ability to communicate effectively through engineering drawings, written reports, or oral presentations.</p> <p>an ability to communicate effectively through engineering drawings, written reports, or oral presentations.</p>	<p>5.1: an ability to understand professional, ethical and social responsibilities.</p> <p>an ability to understand professional, ethical and social responsibilities.</p>	<p>6.1: an ability to function effectively on teams.</p> <p>an ability to function effectively on teams.</p>	<p>7.1: a respect for diversity and a knowledge of contemporary professional, societal and global issues.</p> <p>a respect for diversity and a knowledge of contemporary professional, societal and global issues.</p>

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MET 103 Introduction to Technical Graphics with CAD	I			I					I			
MET 130 Introduction to Engineering and Technology	I					I		P	I	I	P	I
MET 302 Applied Statics	I	P		I	I							
MET 304 Engineering Analysis	I	P			I							

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MET 329 Fluid Power Technology	P	P	P									
MET 405 Economic Analysis for Engineering and Technology	R				R			P		I	P	
MET 406 Strength of Materials	P	R	P	P	P			P			P	
MET 409 Senior Project in Industrial	P			P	R		R	R	R		R	

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Technology												
MET 430 Senior Seminar	P					P			P	P		
CNST 111 Construction Materials, Methods, and Equipment	I					I						I
CNST 201 Construction Contract Documents and Project Delivery	I					I		I			I	I

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CNST 420 Construction Surveying	P	P	P		I	I		P	P		P	
CVET 401 CAD-Based Applications in Civil Engineering Technology and Surveying	R			P			P		R			
CVET 410 Structural Analysis and Reinforced Concrete Design	P	P	P	P	P			P			P	

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CVET 411 Waste Water System Design	P	R	P	P	P			P			P	
CVET 420 Highway Design	P	R	P	P	P			P			P	
MATH 115 College Algebra		I										
MATH 123 Analytic Geometry and Trigonometry		I										

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MATH 301 Fundamentals and Applications of Calculus	I										
PHYS 105 General Physics I	I										
ENVI 401 Geographic Information Systems: Applications	P	P	P								
ENVI 454 Introduction to Hydrology	P	P	P								

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COMM 101 Introduction to Speech Communication								I			

Legend: I Introduced P Practiced R Reinforced

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