Course Name	Introduction to Technology Education			
Course Number	21051			
Code	**Current Standard**		**Code**	**Revised Standard**
ITE1.0	Analyze the scope and nature of technology		ITE1.0	Analyze the scope and nature of technology
ITE1.1	Examine the relationship between technology and other areas of study		ITE1.1	Examine the relationship between technology and other areas of study
ITE1.2	Understand the effects of technology on the environment		ITE1.2	Understand the effects of technology on the natural environment
ITE1.3	Examine the relationship between the cultural, social, and economic and political effects of technology on society		ITE1.3	Examine the relationship between the cultural, social, economic and political effects of technology on society
ITE2.0	Use the system-thinking model (the feedback loop)		ITE2.0	Apply the system-thinking model (the feedback loop) to technology
ITE2.1	Apply the design process		ITE2.1	Apply the design process to engineering design process
ITE2.2	Apply engineering design			
ITE3.0	Solve problems using innovation, research experimentation and troubleshooting		ITE3.0	Solve problems using innovation, research, experimentation, and design
ITE3.1	Use research and experimentation methods to solve problems		ITE3.1	Use research and experimentation methods to solve problems
ITE3.2	Use innovation and troubleshooting methods to solve problems		ITE3.2	Use innovative and/or troubleshooting methods to solve problems
ITE4.0	Apply manipulative skill sets		ITE4.0	Apply appropriate skill sets to various ranges of technology
ITE4.1	Understand biotechnologies		ITE4.1	Understand biotechnologies
ITE4.2	Understand energy and power technologies		ITE4.2	Understand energy and power technologies
ITE4.3	Understand information and communication technologies		ITE4.3	Understand information and communications technology
ITE4.4	Understand transportation technologies		ITE4.4	Understand transportation technologies
ITE4.5	Understand manufacturing technologies and materials		ITE4.5	Understand manufacturing technologies and materials
ITE4.6	Understand construction technologies		ITE4.6	Understand construction technologies
			ITE5.0	Understand ethics and professionalism in technology
			ITE5.1	Investigate and demonstrate understanding of professionalism and ethics in the technological environment
			ITE6.0	Understand safety and health in technology
			ITE6.1	Understand implication of health and public safety standards

Course Name	Middle School Introduction to STEM			
Course Number	21050			
Code	**Current Standard**		**Code**	**Revised Standard**
TEMS1.0	Understand the scope and nature of technology			
TEMS1.1	Identify the core concepts and characteristics of technology		STEM1.0	Understand the components to STEM
TEMS1.2	Understand the core relationships between technology and other areas of study			
TEMS2.0	Analyze the affect of technology on society and the environment		STEM1.1	Understand the components to STEM and the impact of STEM on society
TEMS2.1	Analyze the effects of technology on the environment			
TEMS2.2	Examine the relationship among the cultural, social, economic, and political effects of technology			
TEMS2.3	Examine how technology influenced history			
TEMS3.0	Apply problem-solving strategies demonstrating use of the design process			
TEMS3.1	Understand the components of the design process		STEM4.0	Understand the foundation of STEM in engineering
			STEM4.1	Understand how STEM is a part of all aspects of engineering
			STEM4.2	Evaluate the career opportunities associated with engineering
TEMS3.2	Apply the engineering design process			
TEMS3.3	Apply the design process			
TEMS4.0	Understand technology			
TMES4.1	Understand agricultural and related biotechnology			
TEMS4.2	Understand energy and power technology		STEM3.0	Understand the foundation of STEM in relation to energy
			STEM3.1	Identify the application of STEM in the field of energy and/or energy production
			STEM3.2	Explore career options related to energy
TEMS4.3	Understand information and communication technology			
TEMS4.4	Understand transportation technology		STEM2.0	Understand the foundation of STEM in aviation
			STEM2.1	Identify how STEM is applied in the field of aviation
			STEM2.2	Evaluate careers related to aviation
TEMS4.5	Understand manufacturing technology		STEM5.0	Understand the foundation of STEM in robotics
			STEM5.1	Explore the relationship between STEM and robotics
			STEM5.2	Evaluate the career opportunities associated with the field of robotics
TEMS4.6	Understand construction technology			
			STEM1.2	Explore the impact of STEM on related careers

Course Name	Middle School Mechatronics/Robotics				
Course Number	21016				
Code	**Current Standard**		**Code**	**Revised Standard**	
MSMR1.0	Understand the components that make up a robot		MSMR1.0	Understand the components that make up a robot	
MSMR1.1	Know the equipment used in robotics		MSMR1.1	Know the equipment used in robotics	
MSMR1.2	Identify various mechanical systems used in robotics		MSMR1.2	Identify various mechanical systems used in robotics	
MSMR1.3	Demonstrate the use of programming commands		MSMR1.3	Demonstrate the use of programming commands	
MSMR2.0	Investigate the impact of robotics on our society		MSMR2.0	Investigate the impact of robotics on our society	
MSMR2.1	Compare and contrast robotics labor vs human labor		MSMR2.1	Compare and contrast robotics labor vs human labor	
MSMR2.2	Explore career outlook for robotic applications		MSMR2.2	Explore career outlook for robotic applications	
MSMR2.3	Explore new entrepreneurial opportunities using robotics		MSMR2.3	Explore new entrepreneurial opportunities using robotics	
MSMR3.0	Design a robot to solve a particular problem		MSMR3.0	Design a robot to solve a particular problem	
MSMR3.1	Identify robotic applications		MSMR3.1	Identify robotic applications	
MSMR3.2	Propose a robotic design		MSMR3.2	Propose a robotic design	
MSMR3.3	Construct a robot		MSMR3.3	Construct a functional robot	
MSMR3.4	Program a robot		MSMR3.4	Program a robot to perform a specific task	
MSMR3.5	Evaluate robot programming		MSMR3.5	Evaluate robotic programming	

Course Name	Aviation			
Course Number	20053			
Code	**Current Standard**		**Code**	**Revised Standard**
AV1.0	Identify events in the history of flight		AV1.0	Identify events in the history of flight
AV1.1	Identify flight in the ancient world		AV1.1	Identify flight in the ancient world
AV1.2	Identify the development of flight in the early 1900s		AV1.2	Identify the development of flight in the early 1900s
AV1.3	Identify the development of flight during the Golden Age of Flight (1919 to 1939)		AV1.3	Identify the development of flight during the Golden Age of Flight (1918 to 1939)
AV1.4	Identify the development of flight innovation during World War 11 (1939 to 1945)		AV1.4	Identify the development of flight innovation during World War II (1939 to 1945)
AV1.5	Identify the development of flight innovation during the Cold War (1945 to 1991)		AV1.5	Identify the development of flight innovation during the Cold War (1945 to 1991)
AV1.6	Identify the development of flight innovation (1991 to present)		AV1.6	Identify the development of flight innovation (1991 to present)
			AV1.7	Analyze current trends in flight
AV2.0	Investigate the principles of flight		AV2.0	Investigate the principles of flight
AV2.1	Investigate the basic parts and control surfaces		AV2.1	Investigate the basic parts and control surfaces on aircraft
AV2.2	Investigate the four forces of flight		AV2.2	Investigate the four forces of flight
AV2.3	Investigate basic aerodynamics		AV2.3	Investigate basic aerodynamics
AV2.4	Investigate airplane stability		AV2.4	Investigate airplane stability
AV3.0	Understand the flight environment		AV3.0	Understand the flight environment
AV3.1	Comprehend air safety		AV3.1	Comprehend air safety
AV3.2	Comprehend the airport layout		AV3.2	Comprehend the airport layout, inclusive of safety elements
AV3.3	Comprehend airspace control		AV3.3	Comprehend airspace control
AV3.4	Comprehend radio communications		AV3.4	Comprehend radio communications
AV4.0	Understand aircraft systems and performance		AV4.0	Understand aircraft systems and performance
AV4.1	Know the basic aircraft instruments		AV4.1	Know the basic aircraft instruments
AV4.2	Know aircraft systems		AV4.2	Know aircraft systems
AV4.3	Predict aircraft performance		AV4.3	Predict aircraft performance
AV4.4	Calculate weight and balance		AV4.4	Calculate weight and balance
AV5.0	Understand weather and flight		AV5.0	Understand the relationship between weather and flight
AV5.1	Explain basic weather theory		AV5.1	Explain basic weather theory
AV5.2	Describe weather patterns and clouds		AV5.2	Describe weather patterns and clouds
AV5.3	Explain weather hazards		AV5.3	Explain weather hazards
AV5.4	Interpret weather data		AV5.4	Interpret weather data
AV5.5	Identify sources of weather information		AV5.5	Identify sources of weather information
AV6.0	Understand navigation in aviation		AV6.0	Understand navigation in aviation
AV6.1	Understand basic navigation		AV6.1	Understand basic navigation
AV6.2	Understand Dead Reckoning		AV6.2	Understand dead-reckoning and pilotage
AV6.3	Utilize a flight computer		AV6.3	Utilize a flight computer
AV6.4	Understand aeronautical charts		AV6.4	Utilize aeronautical charts
AV6.5	Comprehend radio navigation		AV6.5	Comprehend radio navigation
AV7.0	Understand aviation physiology		AV7.0	Understand aviation physiology
AV7.1	Know the effect on the body in the flight environment		AV7.1	Know the effect on the body in the flight environment
AV8.0	Understand aerospace science and technology		AV8.0	Understand aerospace science and technology
AV8.1	Know the nature and characteristics of space		AV8.1	Understand key concepts affecting exploration of space
AV8.2	Comprehend our Understanding of the universe			
AV8.3	Understand basic rocket theory and space flight		AV8.2	Understand basic rocket theory and space flight
AV8.4	Analyze the space shuttle program		AV8.3	Analyze existing space platforms
AV8.5	Analyze the international space station			
AV8.6	Comprehend the Hubble space telescope			
AV9.0	Explore multiple careers in aviation		AV9.0	Explore multiple careers in aviation
AV9.1	Summarize aviation career fields and occupations		AV9.1	Investigate aviation career fields and occupations

Course Name	Information Systems Analysis & Design				
Course Number	10051				
Code	**Current Standard**		**Code**	**Revised Standard**	
ISAD1.0	Demonstrate knowledge of Information System Analysis and Design		ISAD1.0	Demonstrate knowledge of Information System Analysis and Design	
ISAD1.1	Initiate a system project to customer needs		ISAD1.1	Initiate a system project to customer needs	
ISAD1.2	Evaluate potential applications to meet project requirement		ISAD1.2	Evaluate potential applications to meet project requirement	
ISAD2.0	Demonstrate knowledge of System Installation and Maintenance		ISAD2.0	Demonstrate knowledge of System Installation and Maintenance	
ISAD2.1	Troubleshoot system problems		ISAD2.1	Troubleshoot system problems	
ISAD2.2	Evaluate problem-solving processes and outcomes		ISAD2.2	Evaluate problem-solving processes and outcomes	
ISAD3.0	Demonstrate knowledge of System Administration and Control		ISAD3.0	Demonstrate knowledge of System Administration and Control	
ISAD3.1	Perform general system administration tasks to facilitate the delivery of technical services		ISAD3.1	Perform general system administration tasks to facilitate the delivery of technical services	
ISAD4.0	Demonstrate and apply knowledge of Project Management		ISAD4.0	Demonstrate and apply knowledge of Project Management	
ISAD4.1	Define scope of work to achieve individual and group goals		ISAD4.1	Define scope of work to achieve individual and group goals	
ISAD4.2	Manage information system project methodologies insure system delivery		ISAD4.2	Manage information system project methodologies insure system delivery	
ISAD5.0	Demonstrate knowledge of technical writing and documentation		ISAD5.0	Demonstrate knowledge of technical writing and documentation	
ISAD5.1	Conduct technical research to better understand project goals		ISAD5.1	Conduct technical research to better understand project goals	
ISAD5.2	Design technical documentation to enable the creation of the technical document		ISAD5.2	Design technical documentation to enable the creation of the technical document	
ISAD5.3	Write technical reports to support the development project		ISAD5.3	Write technical reports to support the development project	

Course Name	Electronics			
Course Number	17106			
Code	**Current Standard**		**Code**	**Revised Standard**
ELTRON1.0	Determine general technical literacy skills		E1.0	Determine general technical literacy skills
ELTRON1.1	Employ appropriate units and abbreviations		E1.1	Employ appropriate units and abbreviations in electronics
ELTRON1.2	Determine unknown values in multiple types of electronic circuits		E1.2	Determine unknown values in multiple types of electronic circuits
ELTRON1.3	Identify proper terminology		E1.3	Identify proper terminology in electronics
ELTRON2.0	Demonstrate proficiency in electronic safety		E2.0	Demonstrate proficiency in electronic safety
ELTRON2.1	Determine physiological responses to electrical shock		E2.1	Determine physiological responses to electrical shock
ELTRON2.2	Demonstrate proper safety procedures in the use of soldering and test equipment		E2.2	Demonstrate proper safety procedures in the use of soldering and electronics testing equipment
ELTRON3.0	Demonstrate proficiency in circuity assembly		E3.0	Demonstrate proficiency in circuity assembly
ELTRON3.1	Construct a circuit using schematic symbols for identified components		E3.1	Construct a circuit using schematic symbols for identified components
ELTRON3.2	Construct circuit boards using correct soldering principles and techniques		E3.2	Construct circuit boards using correct soldering principles and techniques
ELTRON3.3	Determine cause of non-operational circuits		E3.3	Determine cause of non-operational circuits
ELTRON4.0	Determine proper use of test equipment		E4.0	Determine proper use of electronic test equipment
ELTRON4.1	Measure resistance, voltage, and current in circuits		E4.1	Measure resistance, voltage, and current in circuits
ELTRON4.2	Classify equipment for signal analysis		E4.2	Classify equipment for signal analysis
ELTRON5.0	Troubleshoot circuits for proper operation		E5.0	Troubleshoot circuits for proper operation
ELTRON5.1	Calculate voltage, current, and power solutions in circuits		E5.1	Calculate voltage, current and power solutions in circuits
ELTRON5.2	Troubleshoot solutions to analyze circuit operation		E5.2	Troubleshoot solutions to analyze circuit operation
ELTRON6.0	Electronics career exploration		E6.0	Explore electronics career options
ELTRON6.1	Research career opportunities in the electronics field		E6.1	Research career opportunities in electronics fields
			E6.2	Explore career outlook for robotic applications

Course Name	Engineering Design & Development			
Course Number	21007			
Code	**Current Standard**		**Code**	**Revised Standard**
EDD1.0	Identify a technologically related problem		EDD1.0	Identify a technologically related problem
EDD1.1	Examine current state of a problem		EDD1.1	Examine current state of a problem
EDD1.2	Research solution options to solve the problem		EDD1.2	Research solution options to solve problem
EDD1.3	Propose new solutions to solve the problem		EDD1.3	Propose new solutions to solve a problem
EDD1.4	Identify the best solution		EDD1.4	Identify the best solutions
EDD2.0	Construct a prototype of the solution to the problem		EDD2.0	Construct a prototype of the solution to problem
EDD2.1	Construct a prototype to model solution		EDD2.1	Construct a prototype to model solution
EDD2.2	Test the prototype for effectiveness		EDD2.2	Test prototype for effectiveness
EDD3.0	Analyze test data results for prototype performance		EDD3.0	Analyze test data results for prototype performance
EDD3.1	Analyze test results		EDD3.1	Analyze test results
EDD3.2	Make decisions based on test result data		EDD3.2	Make decisions based on test result data
EDD3.3	Redesign the product to meet performance needs		EDD3.3	Redesign the product to meet performance needs
EDD4.0	Communicate solutions and the prototype for others		EDD4.0	Communicate solutions and the prototype for others
EDD4.1	Communicate solutions for the product		EDD4.1	Communicate solutions for product

Course Name	Robotics			
Course Number	21009			
Code	**Current Standard**		**Code**	**Revised Standard**
RBTMT1.0	Classify equipment in the chosen topic areas		RBT1.0	Identify components of a robotic system
RBTMT1.1	Demonstrate knowledge of equipment used in topic areas		RBT1.1	Describe the parts necessary to make a robot
RBTMT1.2	Examine the systems relationships		RBT1.2	Examine the relationship among the subsystems
RBTMT2.0	Access and demonstrate safety proficiency in topic areas		RBT2.0	Understand safety procedures and ethical issues inherent to robotics
RBTMT2.1	Demonstrate proper safety procedures		RBT2.1	Demonstrate proper safety procedures
RBTMT2.2	Determine how to apply Lockout-Tag out procedure		RBT2.2	Determine how to apply OSHA Compliant Lockout-Tag-out procedures
RBTMT2.3	Classify materials safety data sheet (MSDS)			
RBTMT3.0	Construct, analyze and troubleshoot circuits		RBT3.0	Construct, analyze and troubleshoot circuits
RBTMT3.1	Build a circuit according to schematic diagram		RBT3.1	Build circuit according to schematic diagram
RBTMT3.2	Calculate circuit parameters		RBT3.2	Calculate circuit parameters
RBTMT3.3	Measure circuits parameters		RBT3.3	Measure circuits parameters
RBTMT3.4	Compare calculated and measured solutions to analyze circuit operation		RBT3.4	Compare calculated and measured solutions to analyze circuit operation
RBTMT3.5	Examine Proper terminology and career possibilities		RBT5.0	Research career opportunities and industry applications
			RBT5.1	Explore career opportunities in the robotics field
			RBT5.2	Investigate commercial application of robotic systems
			RBT2.3	Examine current ethical issues
			RBT4.0	Design, build, and analyze a robotic system
			RBT4.1	Build and program a robot to perform a specified task
			RBT4.2	Test the robot for any flaws in hardware or bugs in software
			RBT4.3	Write a technical report evaluating the system performance

Course Name	Introduction to Energy/Power			
Course Number	20101			
Code	**Current Standard**		**Code**	**Revised Standard**
EP1.0	Analyze the history of energy/power sources		EP1.0	Analyze the history of energy/power sources
EP1.1	Examine the historical development of energy/power production		EP1.1	Examine the historical development of energy/power production
EP1.2	Assess the impact of energy/power on the way we live and work		EP1.2	Assess the impact of energy/power on the way people live and work
EP2.0	Examine the relationship between work, energy and power		EP2.0	Examine the relationships among work, energy and power
EP2.1	Define work, power, and energy		EP2.1	Define work, power, and energy
EP2.2	Examine the relationship between power sources		EP2.2	Examine the relationship between power and energy sources
EP3.0	Understand the transmission of energy and power		EP3.0	Understand the transmission of energy and power
EP3.1	Understand how a mechanical system operates		EP3.1	Understand how a mechanical system operates
EP3.2	Understand the types of simple machines		EP3.2	Understand the types of simple machines
EP3.3	Understand both liquid and gas forms of power transmission		EP3.3	Understand both liquid and gas forms of power transmission
EP3.4	Understand the laws that govern electricity		EP3.4	Understand the laws that govern electricity
EP4.0	Understand alternative energy		EP4.0	Understand alternative energy
EP4.1	Understand the sources of alternative energy		EP4.1	Understand the sources of alternative energy
EP4.2	Analyze the sources of alternative energy		EP4.2	Analyze the sources of alternative energy
EP5.0	Implement safety with power technology		EP5.0	Implement safety with power technology
EP5.1	Examine safety issues relating to mechanical systems		EP5.1	Examine safety issues relating to mechanical systems
EP5.2	Employ safety practices with fluids		EP5.2	Employ safe practices with fluids
EP5.3	Identify fire classification and extinguishers		EP5.3	Identify fire classifications and extinguishers
EP5.4	Employ safety practices with electricity		EP5.4	Employ safety practices with electricity
EP6.0	Understand scientific concepts for energy and power technology		EP6.0	Understand scientific concepts for energy and power technology
EP6.1	Understand how energy converts from one form to another		EP6.1	Understand how energy converts from one form to another
EP6.2	Understand the categories of energy		EP6.2	Understand the categories of energy
EP6.3	Understand that an engine performing work does exhaust thermal energy that cannot be retrieved to the		EP6.3	Understand that an engine performing work exhausts thermal energy that cannot be retrieved to the surroundings
EP6.4	Understand which energy sources can be renewable and non-renewable		EP6.4	Understand which energy sources can be renewable and non-renewable
			EP7.0	Explore energy and power career options
			EP7.1	Research career opportunities in energy and power fields

Course Name	Alternative Energy Systems			
Course Number	21057			
Code	**Current Standard**		**Code**	**Revised Standard**
AES1.0	Understand the historical development of alternative energy generation systems		AES1.0	Understand the historical development of alternative energy systems
AES1.1	Understand the historical background of alternative energy generation		AES1.1	Understand the historical background of alternative energy generation
AES1.2	Analyze the role of society in the use of energy generation methods		AES1.2	Analyze the role of society in the use of energy generation methods
AES1.3	Analyze the cultural, socioeconomic and political effects of alternate energy technologies		AE1.3	Analyze the cultural, socioeconomic and political effects of alternative energy technologies
AES2.0	Investigate a basic understanding of alternative energy		AES2.6	Model an alternative energy system
AES2.1	Understand the key terms of technology			
AES2.2	Understand the key concepts of technology			
AES3.0	Understand the types of major energy systems		AES2.0	Understand the types of major energy systems
AES3.1	Analyze the characteristics of wind energy generation systems		AES2.1	Analyze the characteristics of wind energy generation systems
AES3.2	Analyze the characteristics of biomass energy generation systems		AES2.2	Analyze the characteristics of biomass energy generation systems
AES3.3	Analyze the characteristics of solar energy generation systems		AES2.3	Analyze the characteristics of solar energy generation systems
AES3.4	Analyze the characteristics of geothermal energy generation systems		AES2.4	Analyze the characteristics of geothermal energy generation systems
AES3.5	Analyze the characteristics of traditional energy generation systems		AES2.5	Analyze the characteristics of traditional energy generation systems
AES4.0	Understand the environmental impact of using alternate energy generation technologies		AES1.4	Understand the environmental impact of energy production and consumption
AES4.1	Understand the environmental effects of alternate energy technologies			
			AES3.0	Research alternative energy careers and trends in energy development
			AES3.1	Identify careers in alternative energy
			AES3.2	Identify future energy resources

Course Name	Introduction to Engineering			
Course Number	21001			
Code	**Current Standard**		**Code**	**Revised Standard**
IE1.0	Explore the fields of engineering		IE1.0	Examine the fields of engineering
IE1.1	Examine the evolution of engineering		IE1.1	Examine the evolution of engineering
IE1.2	Identify the types of engineers		IE1.2	Identify the types of engineers
IE1.3	Describe the engineering team		IE1.3	Describe the engineering team
IE2.0	Investigate various engineering systems		IE2.0	Investigate various engineering systems
IE2.1	Identify the various types of engineering systems		IE2.1	Identify various types of engineering systems
IE2.2	Apply engineering systems to solve problems		IE2.2	Apply engineering systems to solve problems
IE3.0	Apply the engineering process to a product		IE3.0	Apply the engineering process to a product
IE3.1	Design a product		IE3.1	Design a product
IE3.2	Construct a 3-D model		IE3.2	Construct a three-dimensional (3-D) model
IE3.3	Build and test a prototype		IE3.3	Build and test a prototype
IE3.4	Develop a system to produce a final product		IE3.4	Develop a system to produce a final product
IE4.0	Demonstrate effective communication		IE4.0	Demonstrate effective communication
IE4.1	Demonstrate effective oral communication		IE4.1	Demonstrate effective oral communication
IE4.2	Demonstrate effective written communication		IE4.2	Demonstrate effective written communication
IE4.3	Demonstrate effective graphic communication		IE4.3	Demonstrate effective graphic communication
IE5.0	Examine testing procedures used on materials in engineering		IE5.0	Examine testing procedures used on materials in engineering
IE5.1	Analyze materials based on their properties		IE5.1	Analyze materials based on their properties
IE5.2	Analyze materials testing procedures		IE5.2	Analyze material testing procedures

Course Name	Bioprocess Engineering			
Course Number	TBD			
Code	**Current Standard**		**Code**	**Revised Standard**
	No current standards exist		BE1.0	Understand the basic concepts of bioprocess system and biotechnological processes
			BE1.1	Identify bio-based products
			BE1.2	Identify microbial processes that can be implemented in bioprocessing
			BE1.3	Understand how biotechnology can be integrated with engineering
			BE2.0	Apply basic knowledge of biological science and engineering in developing products
			BE2.1	Understand how raw materials are used for developing products
			BE2.2	Understand how the chemical composition of a raw material affects the design process
			BE3.0	Understand issues associated with implementation and operation of biotechnological processes
			BE3.1	Analyze problems associated with bioprocessing; for example environmental, technical, sustainable
			BE3.2	Understand how to operate a bioreactor
			BE4.0	Career exploration in bioprocess engineering
			BE4.1	Explore the role of bioprocess engineering in an agriculture related area
			BE4.2	Understand the role of bioprocess engineering in food processing
			BE4.3	Understand how bioprocess engineering is critical to water and wastewater treatment technologies
			BE4.4	Understand how bioprocess engineering can improve the rural economy
			BE5.0	Understand workplace ethics and professionalism in bioprocess engineering
			BE5.1	Investigate and demonstrate understanding of professionalism and workplace ethics in the technological environment
			BE6.0	Understand safety and health in bioprocessing engineering
			BE6.1	Understand implications of health and public safety standards