SLO to PLO Alignment Report

CAN Program - Engineering & Computer Science

CAN PLO #1 - Apply knowledge of math, science, and engineering or computer science to identify, formulate, and solve engineering/computer science problems.

CAN Dept - Computer Science

CAN CIS 118: Introduction to Computer Science

Simple: Correctly write, compile and execute a Java program to solve a simple problem with user input.

CAN CIS 118: Introduction to Computer Science

Class: Correctly implement a class in Java and create a driver program to test the class.

CAN CIS 118: Introduction to Computer Science

decisions: Correctly use decision structures in a Java program to execute alternatives depending on user input.

CAN CIS 118: Introduction to Computer Science

repetition: Correctly use repetition in a Java program to solve a problem.

CAN CIS 118: Introduction to Computer Science

Arrays and Files: Correctly use an array to store data read from a file, process the data and write the results to a file.

CAN CIS 118: Introduction to Computer Science

GUI: Correctly implement a GUI interface for a Java application or applet.

CAN CIS 250: Introduction to Object Oriented Programming: C++

control: Correctly use control structures in a program

CAN CIS 250: Introduction to Object Oriented Programming: C++

array: Correctly use an array to solve a problem

CAN CIS 250: Introduction to Object Oriented Programming: C++

pointers: Correctly use pointers, dynamic memory allocation and file operations to solve a problem.

CAN CIS 250: Introduction to Object Oriented Programming: C++

CAN CIS 250: Introduction to Object Oriented Programming: C++

library: Correctly use library classes and exceptions to handle errors in a program

CAN CIS 250: Introduction to Object Oriented Programming: C++

inheritance: Correctly use inheritance to solve a problem

CAN CIS 252: Introduction to Data Structures: C++

Big-O: Correctly use Big-O notation to describe how the runtime of an algorithm depends on size.

CAN CIS 252: Introduction to Data Structures: C++

linked-list: Correctly use a linked-list to solve a problem

CAN CIS 252: Introduction to Data Structures: C++

ADT: Correctly implement an abstract data type (ADT) as a C++ class.

CAN Dept - Engineering

CAN ENGR 100   : Introduction to Engineering

Calculations: Formulate and perform elementary engineering calculations to aid the selection of the best design for a simple device.

CAN ENGR 100   : Introduction to Engineering

Data: Perform experiments analyze and interpret data, and prepare a report summarizing the results of the experiments.

CAN ENGR 210   : Engineering Graphics

Orthographic: Apply rules of orthographic projection to create multiview drawings.

CAN ENGR 210   : Engineering Graphics

Pictorials: Create pictorials from orthographic views.

CAN ENGR 210   : Engineering Graphics

CAD: Use CAD software to create 2D engineering drawings, including working drawings and assembly drawings, as well as 3D models and assemblies.

CAN ENGR 210   : Engineering Graphics

Design: Apply the engineering design process to a design project.

CAN ENGR 210   : Engineering Graphics

Symbols: Adhere to the standard conventions for terminology, symbols, and styles used in engineering graphics.

CAN ENGR 230   : Engineering Statics

Reduce force: Reduce systems of forces to one force or one force and one couple.

CAN PLO #1 - Apply knowledge of math, science, and engineering or computer science to identify, formulate, and solve engineering/computer science problems.

CAN ENGR 230 : Engineering Statics

Reduce force: Reduce systems of forces to one force or one force and one couple.

CAN ENGR 230 : Engineering Statics

Rigid: Solve for unknown forces for rigid bodies in two-dimensional and three-dimensional equilibrium.

CAN ENGR 230 : Engineering Statics

trusses: Analyze trusses, frames, and machines for external reaction forces and forces between the members.

CAN ENGR 230 : Engineering Statics

centroids: Calculate centroids and moments of inertia for composite bodies.

CAN ENGR 230 : Engineering Statics

Internal: Solve for internal forces in members and construct shear and bending moment diagrams for beams.

CAN ENGR 230 : Engineering Statics

Friction: Solve problems that include friction.

CAN ENGR 230 : Engineering Statics

stability: Analyze the stability of rigid bodies in equilibrium.

CAN ENGR 240 : Engineering Dynamics

particle kinematics: Derive and apply the relationships between position, velocity, and acceleration of a particle in rectilinear and curvilinear motion.

CAN ENGR 240 : Engineering Dynamics

plane motion: Derive relations defining the velocity and acceleration of any particle on a rigid body for translation, rotation and general plane motion.

CAN ENGR 240 : Engineering Dynamics

Newton: Correctly apply Newton's second law to analyze the motion of a particle in rectilinear or curvilinear translation acted upon by forces, or a rigid body in plane motion acted upon by forces and moments.

CAN ENGR 240 : Engineering Dynamics

work-energy: Apply the method of work and energy to problems involving a single particle, a system of particles, or a rigid body in plane motion.

CAN ENGR 240 : Engineering Dynamics

Analysis: Select the method of analysis that is best suited for the solution of a given problem. (Newton's Law, Work and Energy, Impulse and Momentum, or a combination of these methods.)

CAN ENGR 240 : Engineering Dynamics

Coriolis: Describe and analyze the plane motion of a particle relative to a rotating frame. Determine the Coriolis acceleration in plane motion.

CAN ENGR 240 : Engineering Dynamics

CAN PLO #1 - Apply knowledge of math, science, and engineering or computer science to identify, formulate, and solve engineering/computer science problems.

CAN ENGR 240 : Engineering Dynamics

Impact: Apply the principle of impulse and momentum to problems of direct and oblique central impact, as well as eccentric impact.

CAN ENGR 260 : Circuits And Devices

responses: Analyze electric circuits for DC, transient, and AC voltage and current responses.

CAN ENGR 260 : Circuits And Devices

techniques: Evaluate different circuits analysis techniques and choose an appropriate technique for a particular circuit.

CAN ENGR 260 : Circuits And Devices

Solution: Synthesize a method of solution to the determine current or voltage in any circuit using a combination Kirchhoff?s Laws, loop and node analysis, the solution of differential equations, generalized impedance and admittance techniques, and phasor methods.

CAN ENGR 260 : Circuits And Devices

op amp: Apply a simple model for transistor and operational amplifiers to design and analyze simple circuits.

CAN ENGR 260 : Circuits And Devices

Steady state: Solve steady state AC circuit and network problems involving power transfer and resonance.

CAN ENGR 260 : Circuits And Devices

simulation: Use a circuit simulation program (MultiSIM, PSPICE) to analyze circuit behavior.

CAN ENGR 261 : Circuits & Devices Lab.

Operate: Operate, safely and properly, multimeters, power supplies, signal generators and oscilloscopes.

CAN ENGR 261 : Circuits & Devices Lab.

Build: Build, from schematic diagrams, circuits using resistive, capacitive and inductive elements as well as switches, potentiometers, transistors, operational amplifiers, lamps, decade boxes and power supplies

CAN ENGR 261 : Circuits & Devices Lab.

Calculate: Calculate dc and ac voltage, current, and power, and experimentally verify the results for a variety of electrical circuits

CAN ENGR 261 : Circuits & Devices Lab.

Design: Design and construct circuits to experimentally verify circuit theorem?s including Ohm?s Law, Kirchhoff Rules, superposition, Thevenin, and Norton theorems.

CAN ENGR 261 : Circuits & Devices Lab.

Verify: Experimentally verify the transient behavior of first- and second-order RLC circuits.

CAN ENGR 261 : Circuits & Devices Lab.

Reports: Write lab reports that evaluate, analyze and summarize results and measurements of circuit behavior, including a discussion of any discrepancies between theoretical and measured results.

CAN PLO #1 - Apply knowledge of math, science, and engineering or computer science to identify, formulate, and solve engineering/computer science problems.

CAN ENGR 261   : Circuits & Devices Lab.

Simulation: Use a circuit simulation program (PSPICE, MultiSIM) and other computer applications (MATLAB, MS Excel) to predict circuit behavior.

CAN ENGR 270   : Materials Science

crystals: Identify the crystalline structure of models, and explain now the structure?s characteristics affect a material?s properties.

CAN ENGR 270   : Materials Science

Imperfections: Distinguish between the types of imperfections that can occur in crystalline structures and compare their effects on a material?s properties.

CAN ENGR 270   : Materials Science

s-s diffusion: Calculate rates of steady-state diffusion.

CAN ENGR 270   : Materials Science

mechanical properties: Perform tension, compression, and hardness tests, and interpret the results.

CAN ENGR 270   : Materials Science

strengthening mechanisms: Describe different strengthening mechanisms and thermal processing, and compare their effects.

CAN ENGR 270   : Materials Science

polymers: Relate typical properties of polymers and ceramics to their structures.

CAN ENGR 270   : Materials Science

semi-conductors: Describe the mechanisms for electrical conduction in semiconductors.

CAN ENGR 695   : Independent Study

Proposal: Write a proposal to perform an independent study of an engineering topic or problem.

CAN ENGR 695   : Independent Study

Literature search: Perform a literature search needed to support an independent study of an engineering topic.

CAN ENGR 695   : Independent Study

Propose Solutiion: Formulate, refine, analyze and propose a solution to an engineering problem.

CAN ENGR 695   : Independent Study

Engineering Application: Apply engineering knowledge and skills, and use engineering tools to perform an independent research project on a selected engineering topic.

CAN ENGR 695   : Independent Study

Written Report: Write a report that evaluates, analyzes and summarizes the results of the independent study following generally accepted guidelines in technical reports.

CAN PLO #5 - Use techniques, skills, and modern engineering and computer tools necessary for engineering or computer science practice

CAN Dept - Computer Science

CAN CIS 118: Introduction to Computer Science

Simple: Correctly write, compile and execute a Java program to solve a simple problem with user input.

CAN CIS 118: Introduction to Computer Science

Class: Correctly implement a class in Java and create a driver program to test the class.

CAN CIS 118: Introduction to Computer Science

decisions: Correctly use decision structures in a Java program to execute alternatives depending on user input.

CAN CIS 118: Introduction to Computer Science

repetition: Correctly use repetition in a Java program to solve a problem.

CAN CIS 118: Introduction to Computer Science

Arrays and Files: Correctly use an array to store data read from a file, process the data and write the results to a file.

CAN CIS 118: Introduction to Computer Science

GUI: Correctly implement a GUI interface for a Java application or applet.

CAN CIS 250: Introduction to Object Oriented Programming: C++

control: Correctly use control structures in a program

CAN CIS 250: Introduction to Object Oriented Programming: C++

array: Correctly use an array to solve a problem

CAN CIS 250: Introduction to Object Oriented Programming: C++

pointers: Correctly use pointers, dynamic memory allocation and file operations to solve a problem.

CAN CIS 250: Introduction to Object Oriented Programming: C++

library: Correctly use library classes and exceptions to handle errors in a program

CAN CIS 250: Introduction to Object Oriented Programming: C++

inheritance: Correctly use inheritance to solve a problem

CAN CIS 252: Introduction to Data Structures: C++

Big-O: Correctly use Big-O notation to describe how the runtime of an algorithm depends on size.

CAN CIS 252: Introduction to Data Structures: C++

linked-list: Correctly use a linked-list to solve a problem

CAN CIS 252: Introduction to Data Structures: C++

ADT: Correctly implement an abstract data type (ADT) as a C++ class.

CAN CIS 252: Introduction to Data Structures: C++

ADT: Correctly implement an abstract data type (ADT) as a C++ class.

CAN Dept - Engineering

CAN ENGR 100 : Introduction to Engineering

Role: Evaluate the role of engineers in various societies around the world and throughout history.

CAN ENGR 100 : Introduction to Engineering

Disciplines: Recommend the types of projects and responsibilities that are the most appropriate for various engineering disciplines.

CAN ENGR 100 : Introduction to Engineering

Calculations: Formulate and perform elementary engineering calculations to aid the selection of the best design for a simple device.

CAN ENGR 100 : Introduction to Engineering

Drawings: Read and write elementary engineering drawings, instructions, and reports.

CAN ENGR 100 : Introduction to Engineering

Data: Perform experiments analyze and interpret data, and prepare a report summarizing the results of the experiments.

CAN ENGR 100 : Introduction to Engineering

License: Illustrate the processes required to become an engineer and maintain a license.

CAN ENGR 210 : Engineering Graphics

Orthographic: Apply rules of orthographic projection to create multiview drawings.

CAN ENGR 210 : Engineering Graphics

Sectioning/Auxiliary: Create auxiliary and section views of an object following correct conventions.

CAN ENGR 210 : Engineering Graphics

CAD: Use CAD software to create 2D engineering drawings, including working drawings and assembly drawings, as well as 3D models and assemblies.

CAN ENGR 210 : Engineering Graphics

Design: Apply the engineering design process to a design project.

CAN ENGR 210 : Engineering Graphics

Tolerances: Apply standards of dimensioning and tolerancing to engineering drawings.

CAN ENGR 210 : Engineering Graphics

Symbols: Adhere to the standard conventions for terminology, symbols, and styles used in engineering graphics.

CAN ENGR 230 : Engineering Statics

CAN ENGR 230   : Engineering Statics

Reduce force: Reduce systems of forces to one force or one force and one couple.

CAN ENGR 230   : Engineering Statics

Rigid: Solve for unknown forces for rigid bodies in two-dimensional and three-dimensional equilibrium.

CAN ENGR 230   : Engineering Statics

trusses: Analyze trusses, frames, and machines for external reaction forces and forces between the members.

CAN ENGR 230   : Engineering Statics

centroids: Calculate centroids and moments of inertia for composite bodies.

CAN ENGR 230   : Engineering Statics

Internal: Solve for internal forces in members and construct shear and bending moment diagrams for beams.

CAN ENGR 230   : Engineering Statics

Friction: Solve problems that include friction.

CAN ENGR 230   : Engineering Statics

stability: Analyze the stability of rigid bodies in equilibrium.

CAN ENGR 240   : Engineering Dynamics

particle kinematics: Derive and apply the relationships between position, velocity, and acceleration of a particle in rectilinear and curvilinear motion.

CAN ENGR 240   : Engineering Dynamics

plane motion: Derive relations defining the velocity and acceleration of any particle on a rigid body for translation, rotation and general plane motion.

CAN ENGR 240   : Engineering Dynamics

Newton: Correctly apply Newton's second law to analyze the motion of a particle in rectilinear or curvilinear translation acted upon by forces, or a rigid body in plane motion acted upon by forces and moments.

CAN ENGR 240   : Engineering Dynamics

work-energy: Apply the method of work and energy to problems involving a single particle, a system of particles, or a rigid body in plane motion.

CAN ENGR 240   : Engineering Dynamics

Analysis: Select the method of analysis that is best suited for the solution of a given problem. (Newton's Law, Work and Energy, Impulse and Momentum, or a combination of these methods.)

CAN ENGR 240   : Engineering Dynamics

Coriolis: Describe and analyze the plane motion of a particle relative to a rotating frame. Determine the Coriolis acceleration in plane motion.

CAN ENGR 240   : Engineering Dynamics

Impact: Apply the principle of impulse and momentum to problems of direct and oblique central impact, as well as eccentric impact.

CAN ENGR 260   : Circuits And Devices

responses: Analyze electric circuits for DC, transient, and AC voltage and current responses.

CAN ENGR 260   : Circuits And Devices

techniques: Evaluate different circuits analysis techniques and choose an appropriate technique for a particular circuit.

CAN ENGR 260   : Circuits And Devices

Solution: Synthesize a method of solution to the determine current or voltage in any circuit using a combination Kirchhoff?s Laws, loop and node analysis, the solution of differential equations, generalized impedance and admittance techniques, and phasor methods.

CAN ENGR 260   : Circuits And Devices

op amp: Apply a simple model for transistor and operational amplifiers to design and analyze simple circuits.

CAN ENGR 260   : Circuits And Devices

Steady state: Solve steady state AC circuit and network problems involving power transfer and resonance.

CAN ENGR 260   : Circuits And Devices

simulation: Use a circuit simulation program (MultiSIM, PSPICE) to analyze circuit behavior.

CAN ENGR 261   : Circuits & Devices Lab.

Operate: Operate, safely and properly, multimeters, power supplies, signal generators and oscilloscopes.

CAN ENGR 261   : Circuits & Devices Lab.

Build: Build, from schematic diagrams, circuits using resistive, capacitive and inductive elements as well as switches, potentiometers, transistors, operational amplifiers, lamps, decade boxes and power supplies

CAN ENGR 261   : Circuits & Devices Lab.

Calculate: Calculate dc and ac voltage, current, and power, and experimentally verify the results for a variety of electrical circuits

CAN ENGR 261   : Circuits & Devices Lab.

Design: Design and construct circuits to experimentally verify circuit theorem?s including Ohm?s Law, Kirchhoff Rules, superposition, Thevenin, and Norton theorems.

CAN ENGR 261   : Circuits & Devices Lab.

Verify: Experimentally verify the transient behavior of first- and second-order RLC circuits.

CAN ENGR 261   : Circuits & Devices Lab.

Reports: Write lab reports that evaluate, analyze and summarize results and measurements of circuit behavior, including a discussion of any discrepancies between theoretical and measured results.

CAN ENGR 261   : Circuits & Devices Lab.

Simulation: Use a circuit simulation program (PSPICE, MultiSIM) and other computer applications (MATLAB, MS Excel) to predict circuit behavior.

CAN ENGR 270   : Materials Science

crystals: Identify the crystalline structure of models, and explain now the structure?s characteristics affect a material?s properties.

CAN ENGR 270   : Materials Science

crystals: Identify the crystalline structure of models, and explain now the structure?s characteristics affect a material?s properties.

CAN ENGR 270   : Materials Science

Imperfections: Distinguish between the types of imperfections that can occur in crystalline structures and compare their effects on a material?s properties.

CAN ENGR 270   : Materials Science

s-s diffusion: Calculate rates of steady-state diffusion.

CAN ENGR 270   : Materials Science

mechanical properties: Perform tension, compression, and hardness tests, and interpret the results.

CAN ENGR 270   : Materials Science

strengthening mechanisms: Describe different strengthening mechanisms and thermal processing, and compare their effects.

CAN ENGR 270   : Materials Science

polymers: Relate typical properties of polymers and ceramics to their structures.

CAN ENGR 270   : Materials Science

semi-conductors: Describe the mechanisms for electrical conduction in semiconductors.

CAN ENGR 695   : Independent Study

Proposal: Write a proposal to perform an independent study of an engineering topic or problem.

CAN ENGR 695   : Independent Study

Literature search: Perform a literature search needed to support an independent study of an engineering topic.

CAN ENGR 695   : Independent Study

Propose Solutiion: Formulate, refine, analyze and propose a solution to an engineering problem.

CAN ENGR 695   : Independent Study

Engineering Application: Apply engineering knowledge and skills, and use engineering tools to perform an independent research project on a selected engineering topic.

CAN ENGR 695   : Independent Study

Written Report: Write a report that evaluates, analyzes and summarizes the results of the independent study following generally accepted guidelines in technical reports.

CAN ENGR 695   : Independent Study

Oral Presentation: Prepare and deliver an oral presentation of the results of the independent study.

CAN PLO #3 - Design and perform tests or experiments, analyze and interpret data, and prepare a report summarizing the results of the tests or experiments.

CAN Dept - Computer Science

CAN CIS 118: Introduction to Computer Science

Simple: Correctly write, compile and execute a Java program to solve a simple problem with user input.

CAN CIS 118: Introduction to Computer Science

Class: Correctly implement a class in Java and create a driver program to test the class.

CAN CIS 118: Introduction to Computer Science

decisions: Correctly use decision structures in a Java program to execute alternatives depending on user input.

CAN CIS 118: Introduction to Computer Science

repetition: Correctly use repetition in a Java program to solve a problem.

CAN CIS 118: Introduction to Computer Science

Arrays and Files: Correctly use an array to store data read from a file, process the data and write the results to a file.

CAN CIS 118: Introduction to Computer Science

GUI: Correctly implement a GUI interface for a Java application or applet.

CAN CIS 250: Introduction to Object Oriented Programming: C++

control: Correctly use control structures in a program

CAN CIS 250: Introduction to Object Oriented Programming: C++

array: Correctly use an array to solve a problem

CAN CIS 250: Introduction to Object Oriented Programming: C++

pointers: Correctly use pointers, dynamic memory allocation and file operations to solve a problem.

CAN CIS 250: Introduction to Object Oriented Programming: C++

library: Correctly use library classes and exceptions to handle errors in a program

CAN CIS 250: Introduction to Object Oriented Programming: C++

inheritance: Correctly use inheritance to solve a problem

CAN CIS 252: Introduction to Data Structures: C++

Big-O: Correctly use Big-O notation to describe how the runtime of an algorithm depends on size.

CAN CIS 252: Introduction to Data Structures: C++

linked-list: Correctly use a linked-list to solve a problem

CAN CIS 252: Introduction to Data Structures: C++

CAN CIS 252: Introduction to Data Structures: C++

ADT: Correctly implement an abstract data type (ADT) as a C++ class.

CAN Dept - Engineering

CAN ENGR 100   : Introduction to Engineering

Calculations: Formulate and perform elementary engineering calculations to aid the selection of the best design for a simple device.

CAN ENGR 100   : Introduction to Engineering

Data: Perform experiments analyze and interpret data, and prepare a report summarizing the results of the experiments.

CAN ENGR 210   : Engineering Graphics

Design: Apply the engineering design process to a design project.

CAN ENGR 230   : Engineering Statics

trusses: Analyze trusses, frames, and machines for external reaction forces and forces between the members.

CAN ENGR 230   : Engineering Statics

centroids: Calculate centroids and moments of inertia for composite bodies.

CAN ENGR 230   : Engineering Statics

Internal: Solve for internal forces in members and construct shear and bending moment diagrams for beams.

CAN ENGR 240   : Engineering Dynamics

plane motion: Derive relations defining the velocity and acceleration of any particle on a rigid body for translation, rotation and general plane motion.

CAN ENGR 261   : Circuits & Devices Lab.

Operate: Operate, safely and properly, multimeters, power supplies, signal generators and oscilloscopes.

CAN ENGR 261   : Circuits & Devices Lab.

Build: Build, from schematic diagrams, circuits using resistive, capacitive and inductive elements as well as switches, potentiometers, transistors, operational amplifiers, lamps, decade boxes and power supplies

CAN ENGR 261   : Circuits & Devices Lab.

Design: Design and construct circuits to experimentally verify circuit theorem?s including Ohm?s Law, Kirchhoff Rules, superposition, Thevenin, and Norton theorems.

CAN ENGR 261   : Circuits & Devices Lab.

Verify: Experimentally verify the transient behavior of first- and second-order RLC circuits.

CAN ENGR 261   : Circuits & Devices Lab.

Simulation: Use a circuit simulation program (PSPICE, MultiSIM) and other computer applications (MATLAB, MS Excel) to predict circuit behavior.

CAN PLO #3 - Design and perform tests or experiments, analyze and interpret data, and prepare a report summarizing the results of the tests or experiments.

CAN ENGR 261   : Circuits & Devices Lab.

Simulation: Use a circuit simulation program (PSPICE, MultiSIM) and other computer applications (MATLAB, MS Excel) to predict circuit behavior.

CAN ENGR 270   : Materials Science

mechanical properties: Perform tension, compression, and hardness tests, and interpret the results.

CAN ENGR 695   : Independent Study

Proposal: Write a proposal to perform an independent study of an engineering topic or problem.

CAN ENGR 695   : Independent Study

Propose Solutiion: Formulate, refine, analyze and propose a solution to an engineering problem.

CAN ENGR 695   : Independent Study

Engineering Application: Apply engineering knowledge and skills, and use engineering tools to perform an independent research project on a selected engineering topic.

CAN ENGR 695   : Independent Study

Written Report: Write a report that evaluates, analyzes and summarizes the results of the independent study following generally accepted guidelines in technical reports.

CAN PLO #4 - Develop a design or system given a set of requirements and specifications.

CAN Dept - Computer Science

CAN CIS 118: Introduction to Computer Science

Simple: Correctly write, compile and execute a Java program to solve a simple problem with user input.

CAN CIS 118: Introduction to Computer Science

Class: Correctly implement a class in Java and create a driver program to test the class.

CAN CIS 118: Introduction to Computer Science

decisions: Correctly use decision structures in a Java program to execute alternatives depending on user input.

CAN CIS 118: Introduction to Computer Science

repetition: Correctly use repetition in a Java program to solve a problem.

CAN CIS 118: Introduction to Computer Science

Arrays and Files: Correctly use an array to store data read from a file, process the data and write the results to a file.

CAN CIS 118: Introduction to Computer Science

GUI: Correctly implement a GUI interface for a Java application or applet.

CAN CIS 250: Introduction to Object Oriented Programming: C++

control: Correctly use control structures in a program

CAN CIS 250: Introduction to Object Oriented Programming: C++

array: Correctly use an array to solve a problem

CAN CIS 250: Introduction to Object Oriented Programming: C++

pointers: Correctly use pointers, dynamic memory allocation and file operations to solve a problem.

CAN CIS 250: Introduction to Object Oriented Programming: C++

library: Correctly use library classes and exceptions to handle errors in a program

CAN CIS 250: Introduction to Object Oriented Programming: C++

inheritance: Correctly use inheritance to solve a problem

CAN CIS 252: Introduction to Data Structures: C++

Big-O: Correctly use Big-O notation to describe how the runtime of an algorithm depends on size.

CAN CIS 252: Introduction to Data Structures: C++

linked-list: Correctly use a linked-list to solve a problem

CAN CIS 252: Introduction to Data Structures: C++

ADT: Correctly implement an abstract data type (ADT) as a C++ class.

CAN CIS 252: Introduction to Data Structures: C++

ADT: Correctly implement an abstract data type (ADT) as a C++ class.

CAN Dept - Engineering

CAN ENGR 100   : Introduction to Engineering

Calculations: Formulate and perform elementary engineering calculations to aid the selection of the best design for a simple device.

CAN ENGR 210   : Engineering Graphics

CAD: Use CAD software to create 2D engineering drawings, including working drawings and assembly drawings, as well as 3D models and assemblies.

CAN ENGR 210   : Engineering Graphics

Design: Apply the engineering design process to a design project.

CAN ENGR 260   : Circuits And Devices

techniques: Evaluate different circuits analysis techniques and choose an appropriate technique for a particular circuit.

CAN ENGR 260   : Circuits And Devices

Solution: Synthesize a method of solution to the determine current or voltage in any circuit using a combination Kirchhoff?s Laws, loop and node analysis, the solution of differential equations, generalized impedance and admittance techniques, and phasor methods.

CAN ENGR 261   : Circuits & Devices Lab.

Build: Build, from schematic diagrams, circuits using resistive, capacitive and inductive elements as well as switches, potentiometers, transistors, operational amplifiers, lamps, decade boxes and power supplies

CAN ENGR 261   : Circuits & Devices Lab.

Design: Design and construct circuits to experimentally verify circuit theorem?s including Ohm?s Law, Kirchhoff Rules, superposition, Thevenin, and Norton theorems.

CAN ENGR 695   : Independent Study

Proposal: Write a proposal to perform an independent study of an engineering topic or problem.

CAN ENGR 695   : Independent Study

Propose Solutiion: Formulate, refine, analyze and propose a solution to an engineering problem.

CAN ENGR 695   : Independent Study

Engineering Application: Apply engineering knowledge and skills, and use engineering tools to perform an independent research project on a selected engineering topic.

CAN ENGR 695   : Independent Study

Written Report: Write a report that evaluates, analyzes and summarizes the results of the independent study following generally accepted guidelines in technical reports.

CAN PLO #2 - Communicate effectively and work well in situations that require teamwork.

CAN Dept - Computer Science

CAN CIS 118: Introduction to Computer Science

Simple: Correctly write, compile and execute a Java program to solve a simple problem with user input.

CAN CIS 118: Introduction to Computer Science

Class: Correctly implement a class in Java and create a driver program to test the class.

CAN Dept - Engineering

CAN ENGR 100 : Introduction to Engineering

Calculations: Formulate and perform elementary engineering calculations to aid the selection of the best design for a simple device.

CAN ENGR 100 : Introduction to Engineering

Drawings: Read and write elementary engineering drawings, instructions, and reports.

CAN ENGR 100 : Introduction to Engineering

Ethics: Explain and analyze ethical issues in engineering

CAN ENGR 210 : Engineering Graphics

Orthographic: Apply rules of orthographic projection to create multiview drawings.

CAN ENGR 210 : Engineering Graphics

Sectioning/Auxiliary: Create auxiliary and section views of an object following correct conventions.

CAN ENGR 210 : Engineering Graphics

Design: Apply the engineering design process to a design project.

CAN ENGR 210 : Engineering Graphics

Tolerances: Apply standards of dimensioning and tolerancing to engineering drawings.

CAN ENGR 261 : Circuits & Devices Lab.

Build: Build, from schematic diagrams, circuits using resistive, capacitive and inductive elements as well as switches, potentiometers, transistors, operational amplifiers, lamps, decade boxes and power supplies

CAN ENGR 261 : Circuits & Devices Lab.

Design: Design and construct circuits to experimentally verify circuit theorem?s including Ohm?s Law, Kirchhoff Rules, superposition, Thevenin, and Norton theorems.

CAN ENGR 261 : Circuits & Devices Lab.

Reports: Write lab reports that evaluate, analyze and summarize results and measurements of circuit behavior, including a discussion of any discrepancies between

CAN ENGR 261   : Circuits & Devices Lab.

theoretical and measured results.

CAN ENGR 695   : Independent Study

Written Report: Write a report that evaluates, analyzes and summarizes the results of the independent study following generally accepted guidelines in technical reports.

CAN ENGR 695   : Independent Study

Oral Presentation: Prepare and deliver an oral presentation of the results of the independent study.