Surigao City Campus

Bachelor of Science in Electrical Engineering

SURIGAO STATE COLLEGE OF TECHNOLOGY

SSCT

"For Nation's Greater Heights"

I.2. The faculty prepares syllabi with comprehensive contents.

COLLEGE OF ENGINEERING AND INFORMATION TECHNOLOGY
1st Semester, Academic Year 2019-2020

COURSE SYLLABUS in EE 101 – CIRCUIT 1

Institutional Vision, Mission, and Goals

SSCT Vision:

An innovative, technologically-advanced State College in Caraga.

SSCT Mission:
To provide relevant, high quality and sustainable instruction, research, production and extension programs and services within a culture of credible and responsive institutional governance.

SSCT Goals:

1. Foster application of the discipline and provide its learner with industry-based training and education particularly in engineering, technology and fisheries.
2. Conduct and utilize studies for the development of new products, systems and services relevant to Philippine life and of the global village.
3. Promote transfer of technology and spread useful technical skills, thus empowering its learners and their activities.

Institutional Intended Learning Outcomes

: SSCT graduates are expected to:

1. Innovation and technical skills;
2. Exhibit critical thinking collaboration, and communication;
3. Manifest leadership, adaptability and responsibility.

Programs Goals:	The Electrical Engineering program aims to design and apply the generation, transmission, and distribution of electrical energy to produce competent engineers that exhibit positive work ethics and flexibility in work conditions for the development of Caraga.
Programs Educational Objectives:	The BS Electrical Engineering program is geared towards producing graduates who have the following attributes within three to five years from graduation: 1. Graduates demonstrate technical expertise and practical skills in the field of electrical engineering. 2. Graduates demonstrate flexibility in working with multidisciplinary teams and apply professional and ethical responsibility in the practice of electrical engineering. 3. Graduates are engaged in lifelong learning and knowledgeable in contemporary issues relevant to the field of electrical engineering.
Program Outcome(s)	Upon the completion of the course, the students must able to: a. Apply knowledge of mathematics and sciences to solve complex engineering problems; - **enabling** b. Develop and conduct appropriate experimentation, analyze and interpret data; - **demonstrate** c. Function effectively on multi-disciplinary and multi-cultural teams that establish goals, plan tasks, and meet deadlines; - **enabling** d. Communicate effectively with a range of audiences; - **demonstrate** e. Apply techniques, skills, and modern engineering tools necessary for electrical engineering practice; - **enabling** f. Demonstrate knowledge and understanding of engineering and management principles as a member and/or leader in a team to manage projects in multi-disciplinary environment. - **demonstrate**
Course Code	EE 101
Course Title	CIRCUIT 1
Course Credit	3 units lecture, 1 unit laboratory
Pre-requisites/Co-requisites	Physics 102, MATH 107

Course Description: This is a 3-unit course covers the basic concepts and fundamental laws of electrical circuit theory; analysis and application of series, parallel and series-parallel resistive circuits; mesh and nodal analysis theorems; characteristics of inductors and capacitors; analysis of RL, RC, and RLC circuits with excitation.

Course Intended Learning Outcomes At the end of the course, the students should be able to:

Detailed Course Syllabus

Intended Learning Outcome	Topics	Time Frame	Teaching and Learning Activities	Assessment Tasks	Resources	Values Integration	References	Remarks
Express understanding of the Vision and Mission statements of SSCT, including its Goals and Objectives; Analyze the syllabus by looking into the ILOs, Subject Matter, TLAs, Assessment Strategies, Values and References; and Design strategies that will help meet the requirements and obtain desired grades/marks for the course	**ORIENTATION ON THE COURSE** **VMGO** **Syllabus** **Grading System**	**1 hr**	*Big Group Discussion* on VMGO *Documentary Analysis* of Syllabus and Grading System *Concept Mapping (Sunflower Map/Fishbone Map)* on strategies to meet course requirements		Computer/ Projector for Power point presentation of the VMGO Syllabus	Obedience, Punctuality, Diligence	Student Handbook	
Identify basic electrical quantities, electrical units,	**1. BASIC ELECTRICAL QUANTITIES SYSTEM OF**	4 hrs.	*Small Group Discuss* on electrical quantities, electrical units and	*Problem set Compilation* on the Basic Electrical	Whiteboard Marker Handouts	Appreciating the complex of the lesson	Alexander C. & Sadiku M. 4th Edition	

and electrical components Identify and solve Ohm's Law and Kirchhoff's Law	**UNITS; CIRCUIT COMPONENTS** **2. OHM'S LAW AND KIRCHHOFF'S LAWS**	4 hrs.	components *Small Group Discuss* on the Ohm's Law and Kirchhoff's Law	Quantities system of units; Circuit components as well as Ohm's Law and Krchhoff's Laws			(2009) Charles Alexander, Matthew Sadiku-Fundamentals of Electric Circuits (2012, McGraw-Hill Science-Engineering Math)	
Identify and Analyze Series-Parallel Circuits Solve complex Series-Parallel Circuits Problems Learn the application of different types of circuits	**3. ANALYSIS OF SERIES, PARALLEL, SERIES-PARALLEL CIRCUITS** **4. APPLICATIONS OF RESISTIVE CIRCUITS-RESISTANCE BRIDGE CIRCUITS; BIASING CIRCUITS VOLTAGE DIVIDER CIRCUITS; ANALOG METERS**	4 hrs. 4 hrs. 2 hrs.	*Small group discussion and Brainstorming:* Analyze Series-Parallel Circuits and problems *Hands-on Laboratory Activity* on Applications of resistive circuits-resistance bridge circuits.	*Problem set Compilation* on the Analysis of resistive circuits with controlled sources and network theorems Rubrics: Accuracy: 40 Timeliness 30 Attitude/teamwork 30 TOTAL 100	Whiteboard Marker Handouts	Self-confidence in understanding and appreciating the lesson	Alexander C. & Sadiku M. 4th Edition (2009) Charles Alexander, Matthew Sadiku-Fundamentals of Electric Circuits (2012, McGraw-Hill Science-Engineering Math)	
Analyze and Solve complex	**5. ANALYSIS OF RESISTIVE**	4 hrs.	*Small group discussion and*	*Problem set Compilation*	Whiteboard Marker	Awareness in dealing	Alexander C. & Sadiku M.	

Series-Parallel Circuits problems with controlled sources Analyze and Solve Complex Series-Parallel Circuits problems with controlled sources using circuit analysis techniques and network theorems such as Thevenin and Norton Theorems	**CIRCUITS WITH CONTROLLED SOURCES** **6. CIRCUIT ANALYSIS TECHNIQUES AND NETWORK THEOREMS**	4 hrs. 2 hrs.	*Brainstorming:* on Series-Parallel Circuits problems and network theorems of Thevenin and Norton Laws *Hands-on Laboratory Activity* on Circuit analysis techniques and network theorems	on the Analysis of resistive circuits with controlled sources and network theorems Rubrics: Accuracy: 40 Timeliness 30 Attitude/teamwork 30 TOTAL 100	Handouts	with the difficulties in lesson	4th Edition (2009) Charles Alexander, Matthew Sadiku-Fundamentals of Electric Circuits (2012, McGraw-Hill Science-Engineering Math)	
MIDTERM EXAMINATION (3 hours)								
Identify inductors and Capacitors Analyze the DC response of inductors and capacitors	**7. FUNDAMENTALS OF INDUCTORS AND CAPACITORS**	8 hrs. 2 hrs.	*Small group discussion and Brainstorming:* on characteristics of internal forces in rigid bodies, proper plotting and labelling of structural members *Hands-on Laboratory Activity* on inductors and	*Problem set Compilation* on the Internal Forces Rubrics: Accuracy: 40 Timeliness 30	Whiteboard Marker Handouts	Self-confidence in understanding and appreciating the lesson	Alexander C. & Sadiku M. 4th Edition (2009) Charles Alexander, Matthew Sadiku-Fundamentals of Electric Circuits (2012,	

			capacitors	Attitude/teamwork 30 TOTAL 100			McGraw-Hill Science-Engineering Math)	
Identify and Analyze first order dynamic circuits Solve complex problems	**8. ANALYSIS OF FIRST ORDER DYNAMIC CIRCUITS WITH DC EXCITATION**	8 hrs 2 hrs.	*Small group discussion and Brainstorming:* on First order dynamic circuits and complex problems *Hands-on Laboratory Activity* on first order dynamic circuit with DC excitation	*Problem set Compilation* on the Analysis of first order dynamic circuits with DC excitation Rubrics: Accuracy: 40 Timeliness 30 Attitude/teamwork 30 TOTAL 100	Whiteboard Marker Handouts	Self-confidence in understanding and appreciating the lesson	Alexander C. & Sadiku M. 4th Edition (2009) Charles Alexander, Matthew Sadiku-Fundamentals of Electric Circuits (2012, McGraw-Hill Science-Engineering Math)	
Analysis and solve complex second order dynamic circuits	**9. ANALYSIS OF SECOND-ORDER DYNAMIC CIRCUITS WITH DC EXCITATION**	8 hrs. 2 hrs.	*Small group discussion and Brainstorming:* on the Analysis and complex second order dynamic circuits *Hands-on Laboratory Activity* on second order dynamic circuit with	*Problem set Compilation* on the Analysis of Second-order Dynamic Circuits with DC Excitation Rubrics: Accuracy: 40 Timeliness 30 Attitude/teamwork 30	Whiteboard Marker Handouts	Self-confidence in understanding and appreciating the lesson	Alexander C. & Sadiku M. 4th Edition (2009) Charles Alexander, Matthew Sadiku-Fundamentals of Electric Circuits (2012, McGraw-Hill Science-	

			DC excitation	TOTAL 100			Engineering Math)	
FINAL EXAMINATION (3 hours)								

Course Requirements:

- Individual Reports
- Graphic Organizers
- Group Project
- Midterm & Final Examination

Grading System:

Criteria: Academic Subjects	Lecture Grade	Laboratory Grade
➢ Quizzes/ Problem Sets	20%	
➢ Project	30%	
➢ Laboratory Exercises		50%
➢ Laboratory Reports		50%
➢ Major Examination	50%	____
TOTAL	100%	100%

Grade Point	Description
1.0	Excellent
1.5 – 1.1	Very Good
2.0 – 1.6	Highly Satisfactory
2.5 – 2.1	Good
2.9 – 2.6	Satisfactory
3.0	Passing
5.0	Failed due to poor performance, absences, withdrawal without notice
DRP	Dropped with approved dropping slip
INC	Incomplete requirements but w/ passing class standing. INC is for non-graduating students only

Source: *SSCT Student Handbook*

Course Policies:

1. Attendance sheet will be passed around and the student is responsible to sign to prove his/her presence for that sessions. This is to monitor whether absences incurred by the student is still within the allowed number of absences for a course stipulated in the Student Handbook.
2. Excuse from the class will only be honored if a Memo from the school is issued before the absence or valid excuse letter from parents/guardians is presented after the absence. No other excuses will be entertained.
3. It is a part of your education to learn responsibility and self-discipline, particularly with regards to academic honesty. Cheating is defined to include an attempt to defraud, deceive, or mislead the instructor in arriving at honest grade assessment. Plagiarism is a form of cheating that involves presenting as one's own work the ideas or work of another. Therefore, all portions of any test, project, or major examination submitted by you for a grade must be your own work, unless you are instructed to work collaboratively. Cheating in a major course examination by a student will entail a failing mark for the given course. Plagiarism in papers and other works will entail zero score for the said requirement.
4. The use of multiple choice questionnaires is used during the exams. However, detailed solution to the problem should be written legibly in a clean long size bond paper.
5. Unsatisfactory project will not be accepted. However, the student/group will be given a chance to improve their project. Non-submission of the project on the set deadline means an automatic final grade of 5.
6. Exemptions from taking the final examination are as follows: (1) No exam below 60%, (2) No missed quizzes/exams, (3) Laboratory reports are submitted on the specified date, (4) The project is submitted on the specified deadline, and (5) Absences do not exceed the maximum allowed.
7. This class policy serves as our written agreement for the whole semester.

Prepared by:

ENGR. VERNON V. LIZA
Faculty
Date: Aug 4, 2019

Checked and Reviewed by:

ENGR. JOSELITO S. BALDAPAN, PEE
Program Chair, BSEE
Date: Aug 5, 2019

ENGR. DARWIN C. MANGCA
Program Chair, BSECE
Date: Aug 5, 2019

ENGR. ANALYN S. MORITE, Ph.D. TM
Program Chair, BSCpE
Date: Aug 5, 2019

ENGR. VIRNE V. PORTUGUES
Program Chair, BSCE
Date: Aug 5, 2019

Noted by:

ENGR. ROBERT R. BACARRO, MECE, MBA
Dean, CEIT

Date: Aug. 5, 2019

Recommended by:

CARLOS H. DONOSO, EdD
Campus Director

Date: Aug. 5, 2019

Approved by:

EMMYLOU A. BORJA, EdD
VP for Academic Affairs

Date: Aug. 5, 2019

COLLEGE OF ENGINEERING AND INFORMATION TECHNOLOGY
City Campus
SecondSemester, Academic Year 2021-2022

Outcomes Based-Education (OBE) Syllabus in EE 431
Power Systems Analysis
Course Credit: 4.0 units **(108hrs)**

Institutional Vision, Mission, and Goals

Vision:
An innovative and technologically-advanced State College in Caraga.

Mission:
To provide relevant,

a. high quality and sustainable instruction,
b. research, production and extension programs and
c. services within a culture of credible and responsive institutional governance.

Goals:

1. Foster application of the discipline and provide its learner with industry-based training and education particularly in engineering, technology and fisheries.
2. Conduct and utilize studies for the development of new products, systems and services relevant to Philippine life and of the global village.
3. Promote transfer of technology and spread useful technical skills, thus empowering its learners and their activities.

SSCT Core Values

Service-Oriented **S**ocially Responsive **C**ommitted **T**ransformational

SSCT Quality Policy

Surigao State College of Technology provides quality instruction, research, extension programs and production services to satisfy its customers by responding to their needs and expectations and continually improving its quality management system.

Institutional Graduate Attributes (IGA) :

- Visionary Leader
- Effective Communicator
- Competent Technologist
- Self-Directed Lifelong Learner

Program Goals

The Electrical Engineering program aims to design and apply the generation, transmission, and distribution of electrical energy to produce competent engineers that exhibit positive work ethics and flexibility in work conditions for the development of Caraga.

ProgramEducational Objectives (PEO) and Relationship to Institutional Mission

Program Educational Objectives (PEO)	Mission		
	a	b	c
EE-PEO1. Demonstrate professionalism in electrical engineering and apply professional ethics thru communication and collaboration.	/	/	/
EE-PEO2. Use appropriate techniques, resources, and modern tools necessary for analysis, design, and modeling of complex electrical systems	/	/	/
EE-PEO3. Plan, lead, and implement designated tasks, interact with other engineering professionals, and take leadership roles in electrical engineering organization.	/	/	/
EE-PEO4. Engage in lifelong learning able to discover new opportunities for continuing personal and professional development in electrical engineering	/	/	/

Program Outcomes (PO) and Relationship to Program Educational Objectives (PEO)

Program Outcomes (PO)	Program Educational Objectives (PEO)			
	1	2	3	4
EE-POa.Apply knowledge of mathematics and sciences to solve complex engineering problems				
EE-POb.Develop and conduct appropriate experimentation, analyze and interpret data				
EE-POc.Design a system, component, or process to meet desired needs within	/	/	/	/

realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability, in accordance with standards				
EE-POd.Function effectively on multi-disciplinary and multi-cultural teams that establish goals, plan tasks, and meet deadlines				
EE-POe.Identify, formulate, and solve complex problems in electrical engineering	/	/	/	/
EE-POf.Recognize ethical and professional responsibilities in engineering practice				
EE-POg.Communicate effectively with a range of audiences	/	/	/	/
EE-POh.Understand the impact of engineering solutions in a global, economic, environmental, and societal context				
EE-POi.Recognize the need for additional knowledge and engage in lifelong learning				
EE-POj.Articulate and discuss the latest developments in the field of electrical engineering	/	/	/	/
EE-POk.Apply techniques, skills, and modern engineering tools necessary for electrical engineering practice	/	/	/	/
EE-POl.Demonstrate knowledge and understanding of engineering and management principles as a member and/or leader in a team to manage projects in multidisciplinary environments				

Course Description

This course deals with the study on the basic structure of power systems, recent trends and innovations in power systems, transmission line parameters, network modeling and calculations, load flow studies, short circuit calculations and use of computer software for simulation.

DACUM Main Duties (DMD)

EE-DMD1. Diagnose electrical problems using the electrical diagrams or blue print (as built electrical plans)
EE-DMD2. Install, repair, and maintenance electrical power systems(building wiring, controls, electrical machines and transformers)
EE-DMD3. Facilities Manager
EE-DMD4. Power Plant Manager
EE-DMD5. Electrical Researchers, Professor and Faculty

Course Outcomes (CO) and Relationship to Program Outcomes (PO)

Program Outcome (PO) /Level	Course Outcomes (CO)	Assessment Task (CO-AT)	DACUM Links				
			1	2	3	4	5
EE-POc(Enabling).Design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability, in accordance with standards.	*EE431-CO1*: Design and Create computational models for analysis power systems and able to understand per unit system.	Students conduct electrical engineering simulations. These simulations serve as a group activity where they will analyze and design a power system. Criteria – Functionality and lab report Total Points: 100 points	/		/	/	/
EE-POe(Enabling). Identify, formulate, and solve complex problems in electrical engineering.	*EE431-CO2*: Calculate complex electrical engineering problems related to mathematical description and use of symmetrical component theory.	Students calculate sets of electrical engineering problems using the mathematical description of symmetrical component theory. Criteria – 70% correct answers and solutions Total Points: 100 points	/				/
EE-POg(Enabling).Communicate effectively with a range of audiences	*EE431-CO3*: Communicate effectively with the team, group or other range of audiences when conducting reports and presentations.	Students create a design and present them in the class. Criteria – creativity, functionality, delivery Total Points: 100 points			/	/	/
EE-POj.(Enabling).Articulate and discuss the latest developments in the field of	*EE431-CO4*:Discuss and articulate with the team or group the latest	Students present and discuss the power system design.			/	/	/

electrical engineering	developments in the power system.	Criteria - functionality and delivery Total Points: 100 points					
EE-POk.(Demonstrates). Apply techniques, skills, and modern engineering tools necessary for electrical engineering practice	*EE431-CO5*:Apply simulation tools to perform comprehensive short circuit studies, load flow studies, and optimal power flow studies.	Students conduct electrical engineering simulations. These simulations serve as a group activity where they will analyze and design a power system. Criteria – Functionality and lab report Total Points: 100 points	/		/	/	/

Course Outcomes (CO) and Relationship to Intended Learning Outcomes (ILO)

Course Outcomes (CO)	Intended Learning Outcomes (ILO)
EE431-CO1: Design and Create computational models for analysis power systems and able to understand per unit system. *EE431-CO2*: Calculate complex electrical engineering problems related to mathematical description and use of symmetrical component theory. *EE431-CO3*: Communicate effectively with the team, group or other range of audiences when conducting reports and presentations. *EE431-CO4*:Discuss and articulate with the team or group the latest developments in the power	*EE431-ILO1*: Define the basic concepts of Power system analysis, power system units, and power system elements and calculate problems utilizing these concepts. *EE431-ILO2*: Analyze power system operation and stability control. *EE431-ILO3*: Apply modelling of generators, transformers, lines and cables in positive, negative, and zero sequence systems. *EE431-ILO4*: Analyze and use power system models based on nodal admittance and impedance matrices for the analysis of large-scale power networks.

system *EE431-CO5*:Apply simulation tools to perform comprehensive short circuit studies, load flow studies, and optimal power flow studies.	*EE431-ILO5*: Describe the behaviors of inductors and capacitors when combined in parallel and series. *EE431-ILO6*: Understand Positive Sequence, Negative & zero sequence system and fault analysis.

Detailed Course Content

Intended Learning Outcomes (ILO)	Topics	Time Frame	Teaching and Learning Activities(TLA)	Assessment Tasks (ILO-AT)	Target	Resources	Values Integration	Remarks
EE431-ILO1: Define the basic concepts of Power system analysis, power system units, and power system elements and calculate problems utilizing these concepts. (EE431-CO3, EE431-CO4)	**1. Elements of Power System Analysis** *1.1. Fundamentals of Power Systems* *1.2. Line Constants calculation* *1.3. Capacitance of Transmission lines* *1.4. Circuit Elements* *1.5. Applications*	9.0 hrs. lec	Learning Module 1 *Asynchronous*	Problem solving quiz on the elements of power system analysis.	70% of the students shall have a rating of at least 3.0	Modules, e-books, textbooks, and worksheets	Core Value: *Committed* Sub-Value: *Determined in learning the basic concepts of electric circuits*	
EE431-ILO2: Analyze power system operation and stability control. (EE431-CO1, EE431-CO2, EE431-CO5)	**2. Economic operation of power systems** *2.1. Performance of Lines* *2.2. High Voltage DC Transmission* *2.3. Corona*	9.0 hrs.lec/ 10.0 hrs. lab	Learning Module 2 *Asynchronous*	Problem solving quiz on the Economic operation of power system.	70% of the students shall have a rating of at least 3.0	Videos online, modules, e-books,Multisim software, and worksheets	Core Value: *Committed* Sub-Value: *Determined in learning the basic laws to solve basic electric circuits*	

EE431-ILO3: Apply modelling of generators, transformers, lines and cables in positive, negative, and zero sequence systems. (EE431-CO1, EE431-CO2, EE431-CO5)	**3. Modelling power system components** *3.1. Mechanical Design of Transmission Lines* *3.2. Overhead Line Insulators* *3.3. Insulated Cables*	9.0 hrs.lec./ 15.0 hrs. lab	Learning Module 3 *Asynchronous*	Designing a power system models.	70% of the students shall have a rating of at least 3.0	Videos online, modules, e-books,Multisim software, and worksheets	Core Value: *Committed* Sub-Value: *Dedicated in solving linear electrical circuits using nodal and mesh analysis*	
MIDTERM EXAMINATION– 2.0 Hrs.								
EE431-ILO4: Analyze and use power system models based on nodal admittance and impedance matrices for the analysis of large-scale power networks. (EE431-CO1, EE431-CO2, EE431-CO5)	**4. Load flow analysis** *4.1. Voltage Control* *4.2. Neutral Grounding* *4.3. Transients in Power System*	8.0 hrs.lec / 10.0 hrs. lab	Learning Module 4 *Asynchronous*	Problem solving quiz on the load flow in the power system.	70% of the students shall have a rating of at least 3.0	Videos online, modules, e-books,Multisim software, and worksheets	Core Value: *Committed* Sub-Value: *Perseverant in learning new concepts*	
EE431-ILO5: Understand Positive Sequence, Negative & zero sequence system and fault analysis.(EE431-CO1, EE431-CO2, EE431-CO5)	**5. Short circuit analysis and calculations** *5.1. Symmetrical Components and Fault Calculations*	8.0 hrs.lec / 10.0 hrs. lab	Learning Module 5 *Asynchronous*	Problem solving quiz on the fault current in the power system.	70% of the students shall have a rating of at least 3.0	Modules, e-books,Multisim software, and worksheets	Core Value: *Transformational* Sub-Value: *Optimistic in analysing first-order RL and RC circuits*	

EE431-ILO6: Recommend what protection device will be used in the power system. (EE431-CO1, EE431-CO2, EE431-CO5)	**6. Power system protection: selection and coordination of protection system** *6.1. Protective relays* *6.2. Circuit Breakers* *6.3. Insulation Coordination and Overvoltage Protection*	7.0 hrs.lec / 5.0 hrs. lab	Learning Module 6 *Asynchronous*	Designing the protection system of a given power system.	70% of the students shall have a rating of at least 3.0	Modules, e-books,Multisim software, and worksheets	Core Value: *Confidence* Sub-Value: ability to communicate effectively to professionals and non-specialists alike through reports and presentations.	
FINAL EXAMINATION – 2.0 Hrs.								

References:

Textbooks

J. Duncan Glover, Mulukutla S. Sarma& Thomas J. Overbye (2016), Power System Analysis & Design, 5th ed.,
Charles Alexander & Matthew Sadiku (2016).*Fundamentals of Electric Circuits.*6th ed. McGraw-Hill Education
William H. Hayt, Jr. et. al(2012).*Engineering Circuit Analysis.*8th ed.McGraw-Hill

Course Requirements:

- Laboratory Reports(CO-AT1)
- Problem Sets(CO-AT2)
- Group Project(CO-AT3)
- Quizzes and Assignments
- Midterm and Final exams

Course Evaluation:

Criteria — Lecture Grade

- Quizzesand online outputs/interaction (ILO-AT) 20%
- Performance Tasks (CO-AT) 40%
- Major Exams (Midterm and Final) 40%

TOTAL 100%

Grade Computation: $\frac{Midterm\ Grade + Final\ Grade}{2} = Average\ Grade$

Grade Point	Description
1.0	Excellent
1.5 – 1.1	Very Good
2.0 – 1.6	Highly Satisfactory
2.5 – 2.1	Good
2.9 – 2.6	Satisfactory
3.0	Passing
5.0	Failed due to poor performance, absences, withdrawal without notice
DRP	Dropped with approved dropping slip
INC	Incomplete requirements but w/ passing class standing. INC is for non-graduating students only
NG	No Grade

Source: *SSCT Student Handbook*

Course Policies:

1. Attendance shall be checked in every class session in the Google Meet. This is to monitor the absences incurred by the students in terms of the allowable number of absences for a course as stipulated in the Student Handbook.
2. During online classes, video camera shall be turned on all the time and microphone shall be turned off. The microphone shall be unmuted only if the student's name is called to participate in class discussion.
3. Major examinations in multiple-choice type shall be done online. For problem solving type, detailed solutions shall be written legibly in separate sheets of paper and shall be converted to pdf form prior to submission.
4. Cheating in major examinations which include attempts to defraud, deceive, or mislead the instructor in arriving at an honest assessment shall entail zero score.

5. Plagiarism which is a form of cheating that involves presenting the ideas or work of another as one's own work shall entail zero score.
6. Projects shall be submitted on or before the deadline. Students who submit unsatisfactory projects shall be given the chance to improve their works on the condition that they resubmit the revised outputs on the date set by the instructor. Non-submission of a project on the deadline shall entail zero score.
7. An INC grade shall be given to students who fail to submit the course requirements of at least 95% of the projects and quizzes or failure to take the major examinations.

Revision History:

Revision No.	Revised by	Date of Revision	Date of Implementation	Highlight of Revision
1	Engr. Vernon V. Liza	August 2019	August 2019	Followed OBTL Format as per CMO #101 S. 2017
2	Engr. Andy Bong F. Navarro	July 19, 2021	August 23, 2021	DACUM Workshop vis-à-vis CMO No. 101 S. 2017

Prepared by:

ENGR. ANDY BONG F. NAVARRO
Guest Lecturer

Date: 1-25-2022

Checked and reviewed by:

ENGR. VICENTE Z. DELANTE
Program Chair, BSEE

Date: 1-28-2022

Noted by:

ENGR. ROBERT R. BACARRO, MECE, MBA
Dean, COLLEGE

Date: 1-28-2022

Recommended by:

RONITA E. TALINGTING, PhD
Campus Director

Date: 1-31-2022

Approved by:

EMMYLOU A. BORJA, EdD
VP for Academic Affairs

Date: 1-31-2022