Surigao City Campus

Bachelor of Science in Electrical Engineering

SURIGAO STATE COLLEGE OF TECHNOLOGY

SSCT

"For Nation's Greater Heights"

I.4. The faculty distributes a copy of the syllabus to each student.

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 Socially Responsive Committed Transformational

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

STUDENTS WHO RECEIVED THE SYLLABUS

Syllabus in Power System Analysis
2nd Sem 2021-2022
BSEE – 4A

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CESO, JOHN MANS	11. Dal, Jaykel Kem A.	21.	31.	41.
yon, Deff Enriq E.	12. EDER, ELDO S.	22.	32.	42.
lan, Marc Franchis	13. Enale, John Paul L.	23.	33.	43.
jotsay, JR., Rogelio	14. Galcon, Emelie L.	24.	34.	44.
guinaon, Luzy	15. Malacay, Jerick P.	25.	35.	45.
ng coyo, Lord John K	16. Manlimos, Josiah Ste	26.	36.	46.
ostro, El Jorge A.	17. Navarro, Kessah Jean	27.	37.	47.
rtojos, Rochel G.	18. Pejer, Lowie L.	28.	38.	48.
quilla, Stephane Grac	19. Quinalagan, Hannie Pet	29.	39.	49.
tamora, Jeargie G.	20. Tampipi, Khey Sheena	30.	40.	50.

ANDY BONG F. NAVARRO
Guest Lecturer

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

SYLLABUS in MATH 112 – CALCULUS 2

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.

Institutional Intended Learning Outcomes : SSCT graduates are expected to:

1. Demonstrate innovation and technological skills;
2. Exhibit critical thinking, collaboration, and communication;
3. Manifest leadership, adaptability, and responsibility

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.

Program Educational Objectives and Relationship to Mission

Program Educational Objectives	Mission		
	a	b	c
PEO 1. Innovative and knowledgeable in the latest trends in electrical engineering and demonstrate in their jobs as professional the technical expertise and practical skills.	✓	✓	✓
PEO 2. Flexible in working with multidisciplinary teams, responsible for providing solutions in electrical engineering showing attributes of professionalism and critical thinking.	✓	✓	✓
PEO 3. Engage in lifelong learning and are taking leadership roles in electrical engineering organization that are valuable to the advancement of the society.	✓	✓	✓

Program Outcomes and Relationship to Program Educational Objectives

Program Outcomes	Program Educational Objectives		
	1	2	3
a. Apply knowledge of mathematics and sciences to solve complex engineering problems	✓	✓	✓
b. Develop and conduct appropriate experimentation, analyze and interpret data	✓	✓	✓
c. 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	✓	✓	✓
d. Function effectively on multi-disciplinary and multi-cultural teams that establish goals, plan tasks, and meet deadlines	✓	✓	✓
e. Identify, formulate and solve complex problems in electrical engineering	✓	✓	✓
f. Recognize ethical and professional responsibilities in engineering practice	✓	✓	✓
g. Communicate effectively with a range of audiences	✓	✓	✓
h. Understand the impact of engineering solutions in a global, economic, environmental, and societal context	✓	✓	✓
i. Recognize the need for additional knowledge and engage in lifelong learning	✓	✓	✓
j Articulate and discuss the latest developments in the field of electrical engineering	✓	✓	✓
k. Apply techniques, skills, and modern engineering tools necessary for electrical engineering practice	✓	✓	✓

l. Demonstrate knowledge and understanding of engineering and management principles as a member and/or leader in a team to manage projects in multidisciplinary environments	✓	✓	✓
a. Apply knowledge of mathematics and sciences to solve complex engineering problems	✓	✓	✓

Course Code MATH 112
Course Descriptive Title CALCULUS 2
Course Credit 5 units (Lec)
Pre-requisites/Co-requisites Calculus 1

Course Description

This course introduces the concept of integration and its application to physical problems such as evaluation of areas, volumes of revolution, force, and work; fundamental formulas and various techniques of integration applied to both single variable and multi-variable functions; tracing of functions of two variables.

Course Outcomes and Relationship to Program Outcomes

Course Outcomes: After completing this course, the students must be able to	**Program Outcomes**												
	a	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**i**	**j**	**k**	**l**	**m**
1. Apply integration to the evaluation of areas, volumes of revolution, force and work	I												
2. Use integration techniques on single and multi-variable functions	I												
3. Explain the physical interpretation of the double and triple integral	I												
4. Solve some problems using appropriate integration technique	I												
Level: I – Introductory E – Enabling D - Demonstrative													

Detailed Course Syllabus

Intended Learning Outcome	Topics	Time Frame	Teaching and Learning Activities	Assessment Tasks	Resources	Values Integration	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 hour	*Online Big Group Discussion* on VMGO *Documentary Analysis* of Syllabus and Grading System *Concept Mapping (Sunflower Map/Fishbone Map)* on strategies to meet course requirements	Oral Recitation on VMGO	Computer/ Projector for Power point presentation of the VMGO Syllabus	Obedience, Punctuality, Diligence	
CO 1: Use basic integration rules and Power Formula to evaluate integrals of functions CO 2: Evaluate integrals of functions which contain algebraic functions. CO 3: Evaluate integrals of functions which contain	**INTEGRATION CONCEPT/ FORMULAS** **1.1 Basic Rules/Formulas of Indefinite Integration for Some Algebraic Functions** **1.2 Indefinite Integration of Some Transcendental Functions**	7 hours 10 hours	• Google Meet Lectures • Modular Instruction • Instruction	• Problem-Set • Written quiz	• Modules • Worksheets	• Patience • Perseverance • Diligence	

transcendental function.							
CO 4: Use and solve integration by parts. CO 5: Apply substitution method to evaluate integrals. CO 6: Apply the methods of partial fractions to find integrals involving rational functions	**2. INTEGRATION TECHNIQUES** **2.1 Integration by Parts** **2.2 Integration by Substitution** **2.3 The Methods of Partial Fraction**	3 hours 10 hours 10 hours	• Google Meet Lectures • Modular Instruction • Practice exercise may be taken from the following sites: *tutorial/math/lamar.edu*	• Problem-Set • Written quiz	• Modules • Worksheets	• Patience • Perseveranc e • Diligence	
MIDTERM EXAMINATION – 2 Hours							
CO 7: Evaluate improper integrals.	**3. Improper Integrals**	3 hours	• Google Meet Lectures • Modular Instruction	• Problem-Set • Written quiz	• Modules • Worksheets	• Perseveranc e • Diligence	
CO 8: Apply definite integrals in solving plane areas. CO 9: Solve areas between curves using integration	**4. Definite Integral and Its Applications** **4.1 Plane Area** **4.2 Areas between Curve**	2 hours 5 hours	• Google Meet Lectures • Modular Instruction	• Problem-Set • Written quiz	• Modules • Worksheets	• Patience • Perseveranc e • Diligence	
CO 10: Find volumes using integration. CO 11: Solve work related problems using integration.	**5. Other Applications** **5.1 Volumes** **5.2 Work** **5.3. Hydrostatics Pressure and Force**	5 hours 3 hours 7 hours	• Google Meet Lectures • Modular Instruction	• Problem-Set • Written quiz	• Modules • Worksheets	• Patience • Perseveranc e • Diligence	

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 will be checked in every class sessions to prove the students' presence in the class. This is to monitor whether absences incurred by the student is still within the allowed number of absences for a course as stipulated in the Student Handbook.
2. Excuse from the class will only be honoured 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. The use of multiple choice questionnaires is used during the midterm and final examination. However, for problem solving, a detailed solution is required written legibly in a separate long size bond paper or newsprint.
4. Cheating in midterm and final examination will entail a zero score. Cheating is defined to include an attempt to defraud, deceive, or mislead the instructor in arriving at honest grade assessment.
5. Plagiarism in papers and other works will entail zero score. Plagiarism is a form of cheating that involves presenting as one's own work the ideas or work of another.
6. Students who fail to take the midterm and final examination as scheduled shall be required to write an explanation letter address to the Program Chair, noted by the parents/guardian, and approved by the Dean. After that, he/she can take the missed examination.
7. Clearance is required when the student take the final examination based on No Clearance No Examination Policy.
8. Project shall be submitted on the set deadline by the instructor. Unsatisfactory project will not be accepted. However, the student will be given a chance to improve their project. Non-submission of the project on the set deadline means a zero score.

Revision History:

Revision No.	Date of Revision	Date of Implementation	Highlight of Revision
1	August 2019	1st Sem, AY 2019-2020	Followed school OBTL Format as per CMO #101 S. 2017
2	December 5, 2020	1st Sem, AY 2020-2021	Followed suggestion from ChED COPC.

Preparation, Review, and Approval:

Prepared by:

Engr. ANDY BONG F. NAVARRO
Guest Lecturer

Date: Jan 7, 2020

Checked and Reviewed by:

ENGR. VICENTE Z. DELANTE, MEng'g
Program Chair, BSECE

Date: Jan 7, 2020

Noted by:

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

Date: Jan 8, 2020

Recommended by:

RONITA E. TALINGTING, PhD
Campus Director

Date: Jan 9, 2020

Approved by:

EMMYLOU A. BORJA, EdD
VP for Academic Affairs

Date: Jan 9, 2020

STUDENTS WHO RECEIVED THE SYLLABUS

Syllabus in Calculus 2
2nd Sem 2019-2020
BSEE – 1A

NAME AND SIGNATURE	NAME AND SIGNATURE	NAME AND SIGNATURE	NAME AND SIGNATURE	NAME AND SIGNATU
1. Raffy Buhangin D.	11. Mariel O. Mo	21. Azel Manzanad	31.	41.
2. Alvin Mondano J	12. Jason Ian Cajes	22. Juliet B. Escobal	32.	42.
3. Clint E. Masembord	13. Ravenken Plaz	23. Louienel Geraldino	33.	43.
4. Wenipredo Enderes	14. Matt Tiba	24.	34.	44.
5. Xerxes Coles C	15. Paul Rich Empeñ	25.	35.	45.
6. Gloremie Baron	16. Ron Gen C. Odtoja	26.	36.	46.
7. Nexon Lamanilao	17. Johnrex S. Borja	27.	37.	47.
8. Relvic Pareja	18. Jiryel Dodoc	28.	38.	48.
9. Ace C. Salubre	19. Jahriel Espol	29.	39.	49.
10. Lester D. Arjar	20. Ellah Ericka D. El	30.	40.	50.

ANDY BONG F. NAVARRO
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