



SSCT

"For Nation's Greater Heights"

IMPLEMENTATION

- I.1. The students are regularly informed of the academic requirements of their respective courses.



**SURIGAO STATE COLLEGE OF TECHNOLOGY
SURIGAO CITY**

STUDENT HANDBOOK

2018 EDITION

**Narciso Street, Surigao City 8400, Philippines
Tel. No.: (086) 826-6346
Registrar's Office Tel No.: (086) 826-3908
Website: www.ssct.edu.ph**

TABLE OF CONTENTS

	Page
FOREWORD	2
HISTORICAL BACKGROUND	4
PHILOSOPHY, VISION, MISSION, AND GOALS	6
SYSTEM OF INSTRUCTION	7
FACULTY	7
ORGANIZATIONAL STRUCTURE	8
PHYSICAL FACILITIES	9
CURRICULAR OFFERINGS	10
Article I ACADEMIC POLICIES, PROCEDURE AND GUIDELINES	
Admission Requirements	13
Student Classification	14
Enrolment Policy/Procedure	15
Curricular Policies and Guidelines	16
Retention Policies	19
Examination and Grading System	20
Academic Recognition	21
Graduation Requirements	23
Article II SCHOOL FEES	23
Article III SCHOLARSHIPS AND GRANTS-IN-AID	23
Article IV STUDENT CONDUCT AND DISCIPLINE	
School Uniform	24
Classification and Sanctions of Offenses	26
Disciplinary Procedure and Due Process	27
Article V RIGHTS OF THE STUDENTS	28
Article VI STUDENT DEVELOPMENT AND SERVICES	29
Article VII LIBRARY RULES	30
GENERAL NOTICE	31
REPEALING CLAUSE	31
SEPARABILITY CLAUSE	31
CERTIFICATE OF PROCESS	31

FOREWORD

This handbook serves as a guide of every student of the Surigao State College of Technology (SSCT). It contains information on the basic policies, guidelines and procedures covering enrolment, curricular offerings and requirements, grading system and the rules of conduct. It intends to inform parents on the school's philosophy, vision, mission and goals; historical background, administration and staff; facilities and services; and other information relevant to the academic and vocational programs of the school.

It presumes that enrolling at SSCT means willful acceptance of the total program of education of this college by the students and parents and the commitment of the college to render the highest quality of service. Hopefully, the students are expected to make an extensive use of this information for their welfare, transformation and development of their personality.

5. Applicants must fill-up the Pre-Registration Form (PRF) accurately with the proper guidance of a committee member particularly on the subject sequence, load, time, etc.
6. The committee member assisting the enrollee signs as processing officer.
7. Respective College Dean will check and approve the entries in the PRF.
8. Encoding of subjects to be enrolled and assessment of fees shall be done by the data encoder assigned in each division.
9. Payment of enrollment fees shall be made at the Cashier's office. Red Cross and PTECA voluntary membership fees are collected at their respective offices.
10. Registrar's office will issue print-out of Certificate of Registration (COR).

Section 5. Withdrawal of Registration

1. A student who has already paid the pertinent tuition and other school fees in full or installment but withdrawals in writing, between enrollment and the first two weeks of classes will be entitled to a refund minus the following charges:

<i>Withdrawal of Course during</i>	<i>Charges Due:</i>
Before the classes start	Miscellaneous fees
During the 1st week of classes	Miscellaneous Fees + 10% of the tuition fee and other school fees due for the units enrolled in the term
During the 2nd week of classes	Miscellaneous Fees + 20% of the tuition fee and other school fees due for the units enrolled in the term

2. No refund shall be given to the student after the 2nd week of classes regardless of whether he has actually attended classes or not. However, if valid reasons are presented to be determined by the Dean, the tuition fees shall be proportionately computed up to the last month of attendance shall be charged. For any other reasons, student will have to pay in full.

Section 6. Curricular Policies Guidelines

6.1 Academic Load

1. Regular students must take the full load or term load as prescribed in the approved curriculum for a particular term/semester.
2. The term load of irregular students must not exceed the corresponding number of units prescribed in the approved curriculum of the course for a particular term/semester.
3. Students may be allowed to have a load below the number of the prescribed unit in the curriculum on conditions of employment, health reasons, and unavailability of subjects needed in the curriculum to complete the full load.
4. Regular summer load shall not exceed 9 units, however, for graduating students for summer, 12 units may be allowed.
5. Subject to the endorsement of the College Dean or his/her equivalent and duly approved by the Executive Dean or his/her equivalent, an overload of six (6) units may be allowed to a candidate for graduation in either first or second semester prior to On-the-Job-Training/ Practice Teaching or graduation.
6. The graduating student's academic record as reflected in the evaluation form is the primary consideration for the granting of the six (6) units overload.

6.2 Cross Enrolment

1. Students may be allowed to enroll in another school only in meritorious cases such as:
 - 1.1 To make up for his/her deficiencies
 - 1.2 The subjects are minor subjects and are not offered during the particular term
 - 1.3 The subject is offered but their time schedule is in conflict with other subjects enrolled in.
2. In all cases as reflected in item (1), the student must obtain a permit to cross enroll/study from the Registrar upon approval by the Dean.
3. A student is permitted to cross-enroll provided the total number of units shall not exceed the maximum academic load allowed.
4. Cross-enrollees from other institutions may be admitted within the regular registration period and with the cross-registration permit from the mother institution.

6.3 Changing/Adding/Dropping of Subjects

1. Changing/Adding/Dropping of subjects shall be made only for valid reasons with the approval of the College Dean and acknowledged by the College Registrar
2. Changing and adding of subjects shall be made within 2 weeks after the start of classes and subject to corresponding fees.
3. Subjects changed/added unofficially or without prior approval of the College Dean shall not be given credit.
4. Total load carried by a student including the additional subject/s must not exceed the maximum under the rule on academic load or that which is prescribed for his curriculum year during the term/semester.
5. Students shall be allowed to officially drop a subject(s) before the mid-term examination, without being given a failing grade. The transcript will contain a grade of "DRP" for the subject dropped with a zero credit.
6. Unofficial dropping of subject/s before the mid-term exam shall earn the student a failing grade of 5.0.
7. The refund or adjustment on fees shall follow the same provisions, depending on the date of dropping.

6.4 Request for Unscheduled Subjects

1. Subject unscheduled for a given term may be offered upon written request of sufficient number of students.
2. These subjects may be offered only upon the endorsement of the College Dean/Director and the approval of the Executive Dean/Campus Director.

6.5 Request for Subsidized Class: Subjects may be offered upon written request by the number of students to comply the academic requirements of the curriculum provided additional payment equivalent to the minimum class size is met.

6.6 Shifting

1. Students are allowed to shift from one program to another provided they meet the following:
 - 1.1 grade requirement
 - 1.2 entrance examination rating
 - 1.3 enrolment quota
2. Request to shift from one major/program to another shall be endorsed by the concern sending College Dean and acknowledged by the accepting College Dean.
3. Voluntary shifting will be charged P50.00.



Document Code No.	FM-SSCT-ACAD-002
Revision No.	00
Effective Date	20 September 2018
Page No.	1 of 9

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

Outcomes Based-Education (OBE) Syllabus in Math 112
Calculus 2
 Course Credit: 5.0 units(90hrs)

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.

Program Educational 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 modelling 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				



Document Code No.	FM-SSCT-ACAD-002
Revision No.	00
Effective Date	20 September 2018
Page No.	3 of 9

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 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.

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



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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-POa <i>Introductory</i> Apply knowledge of mathematics and sciences to solve complex engineering problems;	<i>Math112-CO1</i> : Apply the various integration concepts and techniques in both single and multiple integrals to solve complex engineering problems.	Students will solve a set of engineering problems using integration concepts and techniques for both single and multiple integrals. Criteria – 70% correct answers and solution Total Points: 100 points					✓

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

Course Outcomes (CO)	Intended Learning Outcomes (ILO)
<i>Math112-CO1</i> : Apply the various integration concepts and techniques in both single and multiple integrals to solve complex engineering problems.	<p><i>Math112-ILO1</i>: Evaluate integrals using the concepts and formulas of integration. (Math112-CO1)</p> <p><i>Math112-ILO2</i>: Evaluate integrals using the various techniques of integration. (Math112-CO1)</p> <p><i>Math112-ILO3</i>: Evaluate definite integrals. (Math112-CO1)</p> <p><i>Math112-ILO4</i>: Evaluate improper integrals. (Math112-CO1)</p> <p><i>Math112-ILO5</i>: Calculate various applications of definite integrals. (Math112-CO1)</p> <p><i>Math112-ILO6</i>: Analyze multiple integration and evaluate its various applications. (Math112-CO1)</p>



Detailed Course Content

Intended Learning Outcomes (ILO)	Topics	Time Frame	Teaching and Learning Activities(TLA)	Assessment Tasks (ILO-AT)	Target	Resources	Values Integration	Remarks
<i>Math112-ILO1: Evaluate integrals using the concepts and formulas of integration. (Math112-CO1)</i>	1. INTEGRATION CONCEPT/FORMULAS 1.1. <i>Basic Rules/Formulas of Indefinite Integration for Some Algebraic Functions</i> 1.2. <i>Indefinite Integration of Some Transcendental Functions</i>	21 hrs.	Learning Module 1 <i>Asynchronous</i>	Online quiz and problem set on integration concepts and formulas	70% of the students shall have a rating of at least 3.0	Videos online, modules, e-books, and worksheets	Core Value: <i>Committed</i> Sub-Value: <i>Determined application of integration formulas in evaluating integrals</i>	
<i>Math112-ILO2: Evaluate integrals using the various techniques of integration. (Math112-CO1)</i>	2. INTEGRATION TECHNIQUES 2.1. <i>Integration by Parts</i> 2.2. <i>Integration by Substitution</i> 2.3. <i>The Methods of Partial Fraction</i>	23 hrs.	Learning Module 2 <i>Asynchronous</i>	Online quiz and problem set on integration techniques	70% of the students shall have a rating of at least 3.0	Videos online, modules, e-books, and worksheets	Core Value: <i>Committed</i> Sub-Value: <i>Determined application of integration techniques in evaluating integrals</i>	
MIDTERM EXAMINATION– 2.0 Hrs.								
<i>Math112-ILO3: Evaluate definite integrals.</i>	3. DEFINITE INTEGRALS	5.0 hrs.	Learning Module 3 <i>Asynchronous</i>	Assignment and problem set on	70% of the students	Videos online, modules, e-	Core Value: <i>Transformational</i>	



"For Nation's Greater Heights"

Document Code No.	FM-SSCT-ACAD-002
Revision No.	00
Effective Date	20 September 2018
Page No.	6 of 9

(Math112-CO1)	3.1. <i>Definite Integral</i> 3.2. <i>Fundamental Properties of Definite Integrals</i> 3.3. <i>Walli's Formula</i>			definite integrals	shall have a rating of at least 3.0	books, and worksheets	Sub-Value: <i>Adaptive evaluation of definite integrals</i>	
<i>Math112-ILO4: Evaluate improper integrals.</i> (Math112-CO1)	4. IMPROPER INTEGRALS 4.1. <i>Definition</i> 4.2. <i>Convergence of Improper Integrals</i>	5.0 hrs.	Learning Module 4 <i>Asynchronous</i>	Online quiz and problem set on improper integrals	70% of the students shall have a rating of at least 3.0	Videos online, modules, e-books, and worksheets	Core Value: <i>Committed</i> Sub-Value: <i>Determined evaluation of improper integrals</i>	
<i>Math112-ILO5: Calculate various applications of definite integrals.</i> (Math112-CO1)	5. APPLICATIONS OF DEFINITE INTEGRALS 5.1. <i>Plane Area</i> 5.2. <i>Areas between Curve</i> 5.3. <i>Other Applications</i>	20 hrs.	Learning Module 5 <i>Asynchronous</i>	Online quiz and problem set on the application of definite integrals	70% of the students shall have a rating of at least 3.0	Videos online, modules, e-books, and worksheets	Core Value: <i>Committed</i> Sub-Value: <i>Perseverant in solving applications of definite integrals</i>	
<i>Math112-ILO6: Analyze multiple integration and evaluate its various applications.</i> (Math112-CO1)	6. MULTIPLE INTEGRATION AND ITS APPLICATION 6.1. <i>Double Integrals</i> 6.2. <i>Triple Integrals</i> 6.3. <i>Surfaces Tracing</i>	13 hrs.	Learning Module 6 <i>Asynchronous</i>	Online quiz and problem set on multiple integration and its application	70% of the students shall have a rating of at least 3.0	Videos online, modules, e-books, and worksheets	Core Value: <i>Transformational</i> Sub-Value: <i>Optimistic evaluation of multiple integration and its application</i>	
FINAL EXAMINATION – 2.0 Hrs.								



Document Code No	FM-SSCT-ACAD-002
Revision No.	00
Effective Date	20 September 2018
Page No.	7 of 9

"For Nation's Greater Heights"

References:

Stewart, J., Clegg, D. K., & Watson, S. (2020). *Calculus: early transcendentals*. Cengage Learning
 Larson, R. & Edwards, B. (2019). *Calculus* (11th ed). BROOKS/COLE.
 Hughes-Hallett, D., Lock, P. F., Gleason, A. M., Flath, D. E., Gordon, S. P., Lomen, D. O., ... & Tucker, T. W. (2017). *Applied Calculus*. John Wiley & Sons.
 Berresford and Rockett (2016). *Applied Calculus* 7th ed. Cengage Learning
 Krishna's Text Book on Integral Calculus. 26th ed. Krishna Prakashan Media Pvt Ltd. (2020)

Course Requirements:

- Portfolio of solved problem sets in calculus 2(CO-AT1)
- Quizzes and Assignments
- Midterm and Final exams

Course Evaluation:

Criteria	Lecture Grade
➤ Quizzes and online outputs/interaction (ILO-AT)	25%
➤ Performance Tasks (CO-AT)	35%
➤ Major Exams (Midterm and Final)	40%
TOTAL	100%

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

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



Document Code No.	FM-SSCT-ACAD-002
Revision No.	00
Effective Date	20 September 2018
Page No.	8 of 9

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:

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1	Engr. Andy Bong F. Navarro	December 5, 2020	1 st Sem, AY 2020-2021	Followed OBTL Format as per CMO #101 S. 2017
2	Engr. Mark Marvin D. Paglinawan Engr. Vernon V. Liza	January 24, 2021	Feb 7, 2022	DACUM Workshop vis-à-vis CMO No. 101 S. 2017



Document Code No.	FM-SSCT-ACAD-002
Revision No.	00
Effective Date	20 September 2018
Page No.	9 of 9

"For Nation's Greater Heights"

Prepared by:


ENGR. MARK MARVIN D. PAGLINAWAN
 Guest Lecturer


ENGR. VERNON V. LIZA
 Guest Lecturer


Date: 1-25-2022

Noted by:


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

Date: 1-28-2022

Checked and reviewed by:


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

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