



COLLEGE OF ENGINEERING AND ARCHITECTURE GOALS

THE COLLEGE OF ENGINEERING AND ARCHITECTURE SHALL SPEARHEAD IN THE HOLISTIC DEVELOPMENT OF STUDENTS AND ACHIEVED A STATUS CAPABLE OF ADMINISTERING EFFECTIVELY OUTCOMES-BASED EDUCATION, RESEARCH, EXTENSION SERVICES THAT MEET PROFESSIONAL AND TECHNICAL NEEDS OF LOCAL AND INTERNATIONAL INDUSTRIES (BOR RESOLUTION NO. 65, S. 2018).

INSTITUTIONAL GRADUATE OUTCOMES

CREATIVE AND CRITICAL THINKERS LIFE-LONG LEARNERS EFFECTIVE COMMUNICATORS MORALLY AND SOCIALLY UPRIGHT INDIVIDUALS



NATURE OF THE FIELD OF STUDY, BRIEF HISTORY, AND PROGRAM OUTCOMES

SPECIFIC PROFESSIONS /CAREERS/OCCUPATIONS FOR GRADUATES

BSME FACULTY

8

10

24

REVISED CURRICULUM

PROGRAM EDUCATIONAL OBJECTIVES

22 BSME LABORATORY

CEA ORGANIZATIONAL STRUCTURE AND PSME-SU LOOKBOOK **Mechanical Engineering** is a profession that concerns itself with mechanical design, energy conversion, fuel and combustion technologies, heat transfer, materials, noise control and acoustics, manufacturing processes, rail transportation, automatic control, product safety and reliability, solar energy, and technological impacts to society. Mechanical engineers study the behavior of materials when forces are applied to them, such as the motion of solids, liquids, gases, and heating and cooling of object and machines.

Using these basic building blocks, **mechanical engineers** design space vehicles, computers, power plants, intelligent machines and robots, automobiles, trains, airplanes, furnaces, and air - conditioners. Mechanical engineers work on jet engine design, submarines, hot air balloons, textiles and new materials, medical and hospital equipment, and refrigerators and other home appliances. Anything that is mechanical or must interact with another machine or human being is within the broad scope of mechanical engineering.

BRIEF HISTORY

By virtue of **Board Resolution No. 82 series of 1983**, when Northwest Samar State University was still a State College and was formerly known as Tiburcio Tancinco Memorial Institute of Science and Technology, the **Bachelor of Science in Mechanical Engineering Program** first accepted its pioneering students in the School Year 1984– 1985 (TTMIST).

PROGRAM OUTCOMES

- Apply knowledge of mathematics and science to solve mechanical engineering problems.
- **Design** and **conduct experiments**, as well as to **analyze** and **interpret data**.
- **Design a system**, **component**, or **process** to meet desired needs within realistic constraints, in accordance with **standards**.
- Function in multidisciplinary and multi-cultural teams;.
- Identify, formulate, and solve mechanical engineering problems.
- Understand professional and ethical responsibility.
- Communicate effectively in mechanical engineering activities with the engineering community and with society at large.
- Understand the impact of mechanical engineering solutions in a global, economic, environmental, and societal context.



- **Recognize** the need for and **engage** in life-long learning.
- **Use** techniques, skills, and modern engineering tools necessary for mechanical engineering practice.
- **Understand** engineering and management principles as a member and leader of a team, and to manage projects in a multidisciplinary environment.
- **Understand** at least one specialized field of mechanical engineering practice.



SPECIFIC PROFESSIONS/CAREERS/ OCCUPATIONS FOR GRADUATES

The scope of the practice of Mechanical Engineering is defined in the Mechanical Engineering LAW of 1998 or R.A. 8495 and pertains to professional services to industrial plants in terms of:

- consultation requiring mechanical engineering knowledge, skills and proficiency;
- investigation;
- estimation and or valuation;
- planning preparation of feasibility studies;
- designing; preparation of specifications;
- supervision of installation;
- operation including quality management; research, and among others.

The teaching, lecturing and reviewing of a professional mechanical engineering subjects in the curriculum of the BSME degree or a subject in the Mechanical Engineering licensure examination given in any school, college, university or any other educational institution is also considered as practice of Mechanical Engineering.







ENGR. IGNACIO G. TOCAYON JR.

- ASSISTANT PROFESSOR II
- PSME NWSSU STUDENT UNIT ADVISER
- BSME PROGRAM CHAIRPERSON
- MASTERS IN ENGINEERING MAJOR IN ENGINEERING MANAGEMENT
- PHILIPPINE SOCIETY OF MECHANICAL ENGINEERS MEMBER (PSME)

ENGR. FRENZY EDWARD JAN H. CONCHA

• INSTRUCTOR I

- CSC ADVISER
- GRADUATE OF BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING OF NORTHWEST SAMAR STATE UNIVERSITY (2018)
- MASTERS IN ENGINEERING MAJOR IN MECHANICAL ENGINEERING (EARNED UNITS) AT EASTERN VISAYAS STATE UNIVERSITY

ENGR. ANTHONY B. DIAZ

- INSTRUCTOR I
- GRADUATE OF BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING OF NORTHWEST SAMAR STATE UNIVERSITY (2019)





DR.RAMIL S. Catamora

- PROFESSOR VI
- VICE PRESIDENT FOR ACADEMIC AFFAIRS
- MASTERS OF ARTS IN SCIENCE TEACHING -MAJOR IN MATHEMATICS
- DOCTOR OF EDUCATION MAJOR IN EDUCATIONAL ADMINISTRATION

ENGR. RHIO C. DIMAKILING

- ASST. PROFESSOR I
- VICE PRESIDENT FOR ADMINISTRATIVE AFFAIRS
- GRADUATE OF BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING OF NORTHWEST SAMAR STATE UNIVERSITY (TTMIST)
- MASTERS IN ENGINEERING PROGRAM -MAJOR IN MECHANICAL ENGINEERING -TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES - MANILA

BSME FACULTY

BS MECHANICAL ENGINEERING (NON-STEM) REVISED CURRICULUM SY 2024-2025

First Year - 1st Semester

Course	Subject Description	Linita	No. of Hours		Pro Po/Co Po
Code	Subject Description	Onits	Lec	Lab	Ple-Re/Co-Re
NSTP 1	National Service Training Program 1	3	3	0	None
B1	Engineering Algebra	3	3	0	None
B2	Engineering Trigonometry	3	3	0	None
B3	Solid Mensuration	3	3	0	None
B4	Analytic Geometry	3	3	0	None
ME111	Mechanical Engineering Orientation	1	1	0	None
GE 1	Understanding the Self	3	3	0	None
PE 1	Movement Competency Training (PATHFit 1)	2	2	0	None
GEC Elec 1	Living in the IT Era	3	3	0	None
BES 1	Engineering Drawing	1	0	3	None

TOTAL 25

First Year - 2nd Semester

Course	Subject Description	Linita	No. of	Hours	Dro Do /Co Do
Code	Subject Description	Units	Lec	Lab	Pie-Re./Co-Re.
NSTP 2	National Service Training Program 2	3	3	0	NSTP 1
PE 2	Exercise -based Fitness Activities (PATHFit 2)	2	2	0	PE 1
GE 6	Art Appreciation	3	3	0	None
GE 4	Mathematics in the Modern World	3	3	0	None
Rizal	Life and Works of Rizal	3	3	0	None
ChemE	Chemistry for Engineers	4	3	3	None
Math 1	Calculus 1	3	3	0	B1, B2, B3, B4
BES 2	Computer-Aided design	1	0	3	BES 1
GEC Elec 2	The Entrepreneurial Mind	3	3	0	None

TOTAL 25

First Year - Summer

Course	Subject Description	Linite	No. of	Hours	Bro BolCo Bo
Code	Subject Description	Units	Lec	Lab	FIE-IVE/CO-IVE
Math 2	Calculus 2	3	3	0	Math 1
PhysE 1	Physics for Engineers	4	3	3	Math 1/Math 2
PhysE 1	Physics for Engineers	4	3	3	Math 1

TOTAL 7

Second Year - 1st Semester

Course	Subject Description	Linita	No. of	Hours	Pro-Ro
Code	Subject Description	Units	Lec	Lab	Fle-Re.
PE 3	Group Exercise (PATHFit 3)	2	2	0	PE 1 & PE 2
GE 7	Science, Technology and Society	3	3	0	None
Math 3	Engineering Data Analysis	3	3	0	Math 1
Math 4	Differential Equations	3	3	0	Math 2
ES 213	Statics of Rigid Bodies	3	3	0	PhysE 1, Math 2
EE 213	Basic Electrical Engineering	3	2	3	PhysE 1, Math 2
CpE 2	Computer Fundamentals and Programming	1	0	3	None
GEC Elec 3	Indigenous Creative Crafts	3	3	0	None
ME 213	Thermodynamics 1	3	3	0	PhysE 1, Math 2
ME Tech 1	Workshop Theory and Practice	1	0	3	ChemE

Second Year - 2nd Semester

TOTAL 25

Course	Subject Description	Linita	No. of	Hours	Dro Po
Code	Subject Description	Units	Lec	Lab	Fie-Ke.
PE 4	Sports (PATHFit 4)	2	2	0	PE 3
GE 3	The Contemporary World	3	3	0	None
ES 222	Dynamics of Rigid Bodies	2	2	0	ES 213
ECE 223	Basic Electronics	3	2	3	EE 213
ME 223	Thermodynamics 2	3	3	0	ME 213
ME Tech 2	Machine Shop Theory	2	0	6	ME Tech 1
GE 2	Readings in Philippine History	3	3	0	None
BES 6	Engineering Management	2	2	0	None
Math 5	Advance Mathematics for ME	3	3	0	Math 4

TOTAL 23

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Third Year - 1st Semester

Course	Subject Description	Linite	No. of	Hours	Dro Bo
Code	Subject Description	Onits	Lec	Lab	Pie-Re.
ES 313	Mechanics of Deformable Bodies	3	3	0	ES 222
BES 4	Engineering Economics	3	3	0	None
EE 313	DC and AC Machinery	3	2	3	EE 213
ME 312	Heat Transfer	2	2	0	ME 223
ME 333	Fluid Mechanics	3	3	0	ME 213
ME313	Machine Elements	3	2	3	ES 222
ME 332	Vibration Engineering	2	2	0	Math 4
ME 311	Computer Applications for ME	1	0	3	CpE 2
5- E	Т	OTAL 20	21		

Third Year - 2nd Semester

Course No. of Hours Subject Description Units Pre-Re. Code Lab Lec ME 321 Methods of Research for M.E 1 0 Math 3 1 ME 323 3 3 ME 312 **Refrigeration Systems** 0 ME 333 ME 343 Fluid Machineries 3 3 0 ME 322 2 2 0 ME 223 **Combustion Engineering** Materials Science & Engineering for ME 3 2 ES 313, ChemE ME 363 3 3 ME 223 ME 341 Mechanical Engineering Lab 1 1 0 GE 8 Ethics 3 3 0 None GE 5 **Purposive Communication** 3 3 0 None 3rd-year Standing ME Elec 1 2 2 0 Mechatronics TOTAL

Third Year - Summer

Course	Subject Description		Unite	No. of	Hours	Dro Ro
Code	Subject Description		Units	Lec	Lab	Fie-ite.
ME OJT	On the Job Training		3	0	240	4th-year Standing
	an a	TOTAL	3	nati kalenda kateri Si		

21

Fourth Year - 1st Semester

Course	Subject Description	Linita	No. of	Hours	Pre-Re
Code	Subject Description	Onits	Lec	Lab	Fie-ne.
ME Elec 2	Design of Buildings, Piping Systems and Air-	2	2	0	4th-year Standing
Research 1	ME Project Study 1	1	0	3	ME 321
ME413	Air-conditioning and Ventilation system	3	3	0	ME 323
ME 433	Control Engineering	3	2	3	ECE 223
ME 414	Power Plant Design with Renewable Energy	4	3	3	ME 322
ME 453	Machine Design 1	3	3	0	ME 313
BES 5	Techoprenuership 101	3	3	0	GEC Elec 2
ME 412	Mechanical Engineering Lab 2	2	0	6	ME 343, M.E Lab 1
Prof. Enh. 1	ME Corelational course (MATH and ESAS)	3	3	0	4th year standing
	Т	OTAL 24			No. 1

Fourth Year - 2nd Semester

Course	Subject Description	Linite	No. of	Hours	Bro Bo /Co Bo
Code	Subject Description	Units	Lec	Lab	FIE-RE./CO-RE.
ME 424	Industrial Plant Engineering	4	3	3	ME 413/ME 442
Research 2	ME Project Study 2	1	0	3	Reseach 1
ME 423	Machine Design 2	3	2	3	ME 453
ME 443	Basic Occupational Safety and Health	3	3	0	None
ME 442	Manufacturing and Industrial Processes with Plant Visits	2	1	3	None
ME 422	Mechanical Engineering Lab 3	2	0	6	ME 414
ME 462	ME Laws, Ethics, Contracts, Codes and Standards	2	2	0	GE 8
ME Elec 3	Energy Management in Building	2	2	0	4th-year Standing
Prof. Enh. 2	ME Corelational course (PROFESSIONAL SUBJECTS)	3	3	0	4th year standing

TOTAL 22

Note: Total Number of Units to Finish the Course - 195 Units

Prepared by:

Coup IGNACIO G. TOCAYON JR., ME, MEM Concurrent BSME Program Chairperson

Noted by:

ocall IGNACIO G. TOCAYON JR., ME, MEM DEAN-College of Engineering and Architecture

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Forward O. Ramos CEPS | Program In-Charge 1/31/22 24

STEM GRADUATE REVISED CURRICULUM

	Date of	Implementat	ion: SY 2020	0-2021		04/11/2011
IRST YEAR - FI	RST SEMESTER	L PAURA				-1.01.000
COURSE CODE	COURSE DESCRIPTION	LEC HRS.	LAB HRS.	UNIT	PRE-REQUISITE	CO-REQUISITE
ISTP 1	National Service Training Program 1	3		3	None	None
herre	Chemistry for Engineers	- 3 - 1	3	4	None	None
lath 1	Calculus 1		0	3	None	GE 4
AE111	Mechanical Engineering Orientation	- C	0 1		None	None
jE 4	Mathematics in the Modern World	3	0	3	None	Math 1
E1	Understanding the Self	3	0	3	None	None
·E1	Physical Fitness and Gymnastics	2	0	2	None	None
EC Elec 1	Using in the IT Era	3	9	3.0	None	None
3E	Engineering Drawing	0	3	1.1	None	None
~	Total	21	6	23		
IRST YEAR - SE	COND SEMESTER					
COURSE CODE	COURSE DESCRIPTION	LEC HRS.	LAB HRS.	UNIT	PRE-REQUISITE	CO-REQUISITE
STP 2	National Service Training Program 2	3	0	3	NSTP 1	None
E2	Rhytmic Activities	2	0	2	None	None
6 6 E	Art Appreciation	1 3	Ū I	3	None	None
lizal	Life and Works of Rizal	3	0	3	None	None
lath 2	Calculus 2	3	- 0	3	Math 1	None
hvsE 1	Physics for Engineers	3	3	4	Math 1	Math 2
ES 2	Computer-Aided design	0	3	1.1	BES 1	None
100 all 100 all 1	The Esternanoural Mind	1	0	3	GEC Elec 1	
3EU E180 Z	1 1 1 FC LINE CUCHCUNCE WINNING	1.1				
JEU EIBC Z	Total	20	6	22		
JEU EIBC Z	Total	20	6	22		
SEC EIBC 2	FIRST SEMESTER	20	6	22		
SEC EIBC 2	FIRST SEMESTER COURSE DESCRIPTION	20 LEC HRS.	6 LAB HRS.	22 UNIT	PRE-REQUISITE	CO-REQUISITE
SEC EIBC 2 SEC IND YEAR	FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports	20 LEC HRS. 2	6 LAB HRS.	22 UNIT 2	PRE-REQUISITE None	CO-REQUISITE None
SEC EIBC 2 SEC OND YEAR - CLSE CODE SE 3 SE 7	FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports Science, Technology and Society	20 LEC HRS. 2 3	6 LAB HRS.	22 UNIT 2 3	PRE-REQUISITE None None	CO-REQUISITE None None
SEC EI8C 2 SEC OND YEAR - CA SE CODE SE 3 SE 7 Math 4	FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports Science, Technology and Society Differential Equations	20 LEC HRS. 2 3 3	6 LAB HRS. 0 0	22 UNIT 2 3 3	PRE-REQUISITE None None Math 2	CO-REQUISITE None None None
EC EI8C 2 EC AND YEAR - CA SE CODE 25 7 Jath 4 25 213	FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports Science, Technology and Society Differential Equations Statics of Rigid Bodies	20 LEC HRS. 2 3 3 3	6 LAB HRS. 0 0 0	22 UNIT 2 3 3	PRE-REQUISITE None None Math 2 PhysE 1/Math 2	CO-REQUISITE None None None
SEC EI8C 2 SEC CND YEAR - COSE CODE YE 3 SE 7 Math 4 SS 213 SE 213 SE 213	Total Total FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports Science, Technology and Society Differential Equations Statics of Rigid Bodies Basic Electrical Engineering	20 LEC HRS. 2 3 3 3 2	6 LAB HRS. 0 0 0 0 3	22 UNIT 2 3 3 3 3	PRE-REQUISITE None None Math 2 PhysE 1/Math 2 PhysE 1/Math 2	CO-REQUISITE None None None None
EC EI8C 2 EC ND YEAR - Co SE CODE YE 3 SE 7 Aath 4 IS 213 IE 213	FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports Science, Technology and Society Differential Equations Statics of Rigid Bodies Basic Electrical Engineering Computer Fundamentals and	20 LEC HRS. 2 3 3 3 2	6 LAB HRS. 0 0 0 0 3	22 UNIT 2 3 3 3	PRE-REQUISITE None None Math 2 PhysE 1/Math 2 PhysE 1/Math 2 None	CO-REQUISITE None None None None
EC EI8C 2 EC ND YEAR - Co SE CODE YE 3 SE 7 Aath 4 IS 213 IE 213 CpE 2	FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports Science, Technology and Society Differential Equations Statics of Rigid Bodies Basic Electrical Engineering Computer Fundamentals and Programming	20 LEC HRS. 2 3 3 3 2 0	6 LAB HRS. 0 0 0 0 3 3	22 UNIT 2 3 3 3 3 1	PRE-REQUISITE None None Math 2 PhysE 1/Math 2 PhysE 1/Math 2 None	CO-REQUISITE None None None None None
EC EIBC 2 EC AND YEAR - CLSE CODE *E 3 3E 7 Aath 4 IS 213 EE 213 EE 213 EE 213 EE 2 SEC EIBC 3	Total Total FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports Science, Technology and Society Differential Equations Statics of Rigid Bodies Basic Electrical Engineering Computer Fundamentals and Programming Indigenous Creative Crafts	20 LEC HRS. 2 3 3 3 2 0 3	6 LAB HRS. 0 0 0 0 3 3 0	22 UNIT 2 3 3 3 3 3 1 3	PRE-REQUISITE None None Math 2 PhysE 1/Math 2 PhysE 1/Math 2 None GEC Elec 2	CO-REQUISITE None None None None None None
EC EIBC 2 EC AND YEAR - COSE CODE E 3 E 7 Aath 4 ES 213 E 213 E 213 E 213 CoE 2 SEC EIBC 3 AE 213	Total FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports Science, Technology and Society Differential Equations Statics of Rigid Bodies Basic Electrical Engineering Computer Fundamentals and Programming Indigenous Creative Crafts Thermodynamics 1	20 LEC HRS. 2 3 3 3 2 0 3 3 3 2	6 LAB HRS. 0 0 0 3 3 0 0	22 UNIT 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	PRE-REQUISITE None None Math 2 PhysE 1/Math 2 PhysE 1/Math 2 None GEC Elec 2 PhysE 1/Math 2	CO-REQUISITE None None None None None None None
SEC EI8C 2 SEC CAD YEAR - COSE CODE E 3 SE 7 Aam 4 S 213 E 213 E 213 SEC EI8C 3 ME 213 ME 213 ME 7ecn 1	Total FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports Science, Technology and Society Differential Equations Statics of Rigid Bodies Basic Electrical Engineering Computer Fundamentals and Programming Indigenous Creative Crafts Thermodynamics 1 Workshop Theory and Practice	20 LEC HRS. 2 3 3 3 2 0 3 3 0 0	6 LAB HRS. 0 0 0 3 3 0 0 3 3	22 UNIT 2 3 3 3 3 3 3 3 1 3 3 1	PRE-REQUISITE None None Math 2 PhysE 1/Math 2 PhysE 1/Math 2 None GEC Elec 2 PhysE 1/Math 2 ChemE	CO-REQUISITE None None None None None None None None
SEC EI8C 2 SEC CODE 2E 3 3E 7 Aath 4 3E 213 3E 213 3E 213 3E 213 3E 213 3E C EI8C 3 AE 213 AE 213 AE 213 AE 213 AE 7 3E 7 3E 7 3E 7 Aath 4 3E 7 3E	Total Total FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports Science, Technology and Society Differential Equations Statics of Rigid Bodies Basic Electrical Engineering Computer Fundamentals and Programming Indigenous Creative Crafts Thermodynamics 1 Workshop Theory and Practice The Contemporary World	20 LEC HRS. 2 3 3 3 2 0 3 3 0 3 0 3 0 3	6 LAB HRS. 0 0 0 3 3 0 0 3 0 0 3	22 UNIT 2 3 3 3 3 3 3 1 3 3 1 3 3	PRE-REQUISITE None Math 2 PhysE 1/Math 2 PhysE 1/Math 2 None GEC Elec 2 PhysE 1/Math 2 ChemE None	CO-REQUISITE None None None None None None None - None None None
SEC EI8C 2 SEC 24D YEAR - COSE CODE 25 7 Viath 4 25 213 25	Tatal FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports Science, Technology and Society Differential Equations Statics of Rigid Bodies Basic Electrical Engineering Computer Fundamentals and Programming Indigenous Creative Crafts Thermodynamics 1 Workshop Theory and Practice The Contemporary World Total	20 LEC HRS. 2 3 3 3 2 0 3 3 0 3 0 3 2 2	6 LAB HRS. 0 0 0 3 0 0 3 0 0 3 0 0 9	22 UNIT 2 3 3 3 3 3 1 3 3 1 3 25	PRE-REQUISITE None None Math 2 PhysE 1/Math 2 PhysE 1/Math 2 None GEC Elec 2 PhysE 1/Math 2 ChemE None	CO-REQUISITE None None None None None None None None
SEC EI8C 2 SEC MD YEAR - CLSE CODE PE 3 3E 7 Math 4 ES 213 EE 213 CDE 2 SEC EI8C 3 ME 213 ME 7 ech 1 SE 3 SECOND YEAR -	Total FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports Science, Technology and Society Differential Equations Statics of Rigid Bodies Basic Electrical Engineering Computer Fundamentals and Programming Indigenous Creative Crafts Thermodynamics 1 Workshop Theory and Practice The Contemporary World Total SECOND SEMESTER	20 LEC HRS. 2 3 3 2 0 3 0 3 0 3 2 2	6 LAB HRS. 0 0 0 3 0 0 3 0 0 9	22 UNIT 2 3 3 3 3 3 3 1 3 25	PRE-REQUISITE None None Math 2 PhysE 1/Math 2 PhysE 1/Math 2 None GEC Elec 2 PhysE 1/Math 2 ChemE None	CO-REQUISITE None None None None None None None None
SEC EI8C 2 SEC CND YEAR - CO. SE CODE YE 3 SE 7 Math 4 ES 213 SE 213 SEC EI8C 3 ME 213 ME 200 SECOND YEAR - COURSE CODE	Total Total FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports Science, Technology and Society Differential Equations Statics of Rigid Bodies Basic Electrical Engineering Computer Fundamenials and Programming Indigenous Creative Crafts Thermodynamics 1 Workshop Theory and Practice The Contemporary World Total SECOND SEMESTER COURSE DESCRIPTION	20 LEC HRS. 2 3 3 3 2 0 3 0 3 0 3 22	6 LAB HRS. 0 0 0 0 3 0 0 3 0 0 3 0 0 9	22 UNIT 2 3 3 3 3 3 3 3 1 3 3 1 3 25 UNIT	PRE-REQUISITE None None Math 2 PhysE 1/Math 2 PhysE 1/Math 2 PhysE 1/Math 2 None GEC Elec 2 PhysE 1/Math 2 ChemE None	CO-REQUISITE None None None None None None None None
SEC EIBC 2 SEC CAD YEAR - COL SE CODE 25 3 25 7 Math 4 25 213 25 213 25 2 36 C EIBC 3 ME 213 36 C EIBC 3 ME 213 36 C EIBC 3 ME 213 36 C EIBC 3 ME 213 36 C EIBC 3 36 C EIBC 3 37 C EIBC 3 37 C EIBC 3 37 C EIBC 3 38 C EI	Total Total FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports Science, Technology and Society Differential Equations Statics of Rigid Bodies Basic Electrical Engineering Computer Fundamentals and Programming Indigenous Creative Crafts Thermodynamics 1 Workshop Theory and Practice The Contemporary World Total SECOND SEMESTER COURSE DESCRIPTION Exercisional Activities	20 LEC HRS. 2 3 3 3 2 0 3 0 3 0 3 22 LEC HRS. 2 1 2 1 2 1 3 2 1 3 2 1 3 2 1 3 1 3 2 1 3 1 3 2 1 3 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	6 LAB HRS. 0 0 0 0 3 0 0 3 0 0 3 0 0 9	22 UNIT 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	PRE-REQUISITE None None Math 2 PhysE 1/Math 2 PhysE 1/Math 2 PhysE 1/Math 2 None GEC Elec 2 PhysE 1/Math 2 ChemE None PRE-REQUISITE None	CO-REQUISITE None None None None None None None None
ALC EIBC 2 SEC CAL SE CODE 25 3 25 7 Aath 4 25 213 25 213 25 2 2 36 C EIBC 3 AE 213 AE 7 ech 1 36 3 36 COURSE CODE 26 4 Aath 3	Total Total FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports Science, Technology and Society Differential Equations Statics of Rigid Bodies Basic Electrical Engineering Computer Fundamentals and Programming Indigenous Creative Crafts Thermodynamics 1 Workshop Theory and Practice The Contemporary World Total SECOND SEMESTER COURSE DESCRIPTION Recreational Activities Engineering Data Analysis	20 LEC HRS. 2 3 3 3 2 0 3 0 3 0 3 2 2 1 2 1 2 1 3 2 1 3 2 1 3 2 1 3 2 1 3 2 1 3 2 1 3 2 1 3 2 1 3 1 3 2 1 3 1 3 2 1 3 1 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1	6 LAB HRS. 0 0 0 0 3 0 0 3 0 0 3 0 0 3 0 0 9 8 LAB HRS. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	22 UNIT 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	PRE-REQUISITE None None Math 2 PhysE 1/Math 2 PhysE 1/Math 2 PhysE 1/Math 2 None GEC Elec 2 PhysE 1/Math 2 ChemE None PRE-REQUISITE None	CO-REQUISITE None None None None None None -None None None None None None None None
EC EIBC 2 EC AND YEAR - CASE CODE E 3 E 7 Aath 4 E 213 E 213 E 213 E 213 AE 213 AE 213 AE 213 AE 213 AE 7 ccn 1 SE 3 ECOND YEAR - COURSE CODE E 4 Aath 3 E 272	Total FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports Science, Technology and Society Differential Equations Statics of Rigid Bodies Basic Electrical Engineering Computer Fundamentals and Programming Indigenous Creative Crafts Thermodynamics 1 Workshop Theory and Practice The Contemporary World Total SECOND SEMESTER COURSE DESCRIPTION Recreational Activities Engineering Data Analysis Dynamics of Rigid Bodies	20 LEC HRS. 2 3 3 3 2 0 3 0 3 0 3 22 LEC HRS. 2 3 2 2 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 3 2 2 3 3 3 3 2 2 3 3 3 3 2 2 3 3 3 3 2 2 3 3 3 3 3 2 2 2 2 3 3 3 3 3 2 2 2 2 2 3 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2	6 LAB HRS. 0 0 0 3 0 3 0 0 3 0 0 3 0 0 3 0 0 3 0 0 0 3 0 0 0 1 3 0 0 0 0	22 UNIT 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	PRE-REQUISITE None None Math 2 PhysE 1/Math 2 PhysE 1/Math 2 PhysE 1/Math 2 None GEC Elec 2 PhysE 1/Math 2 ChemE None PRE-REQUISITE None Calculus 1 ES 213	CO-REQUISITE None None None None None None None None
Alth 4 SEC Elec 2 Alth 4 SE 213 SEC Elec 3 AE 213 AE 213	Tatal FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports Science, Technology and Society Differential Equations Statics of Rigid Bodies Basic Electrical Engineering Computer Fundamentals and Programming Indigenous Creative Crafts Thermodynamics 1 Workshop Theory and Practice The Contemporary World Total SECOND SEMESTER COURSE DESCRIPTION Recreational Activities Engineering Data Analysis Dynamics of Rigid Bodies Basic Electronics	20 LEC HRS. 2 3 3 3 2 0 3 0 3 0 3 0 3 22 LEC HRS. 2 3 2 2 3 2 2 3 2 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 3 2 2 3 3 3 2 2 2 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2	6 LAB HRS. 0 0 0 3 0 3 0 0 3 0 0 3 0 0 3 0 0 3 0 0 0 3 0 0 0 3 0 0 0 3 0 0 0 3 0	22 UNIT 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	PRE-REQUISITE None Nane Math 2 PhysE 1/Math 2 PhysE 1/Math 2 PhysE 1/Math 2 None GEC Elec 2 PhysE 1/Math 2 ChemE None PRE-REQUISITE None Calculus 1 ES 213 EE 213	CO-REQUISITE None None None None None None None None
EC EIBC 2 EC ND YEAR - CA SE CODE E 3 E 7 Aath 4 E 213 E 2	Tatal FIRST SEMESTER COURSE DESCRIPTION Individual Group Games and Sports Science, Technology and Society Differential Equations Statics of Rigid Bodies Basic Electrical Engineering Computer Fundamentals and Programming Indigenous Creative Creatis Thermodynamics 1 Workshop Theory and Practice The Contemporary World Total SECOND SEMESTER COURSE DESCRIPTION Recreational Activities Engineering Data Analysis Dynamics of Rigid Bodies Basic Electronics Thermodynamics 2	20 20 LEC HRS. 2 3 3 2 0 3 2 0 3 0 3 0 3 2 2 2 2 3 2 2 3 2 2 3 2 2 3 2 2 3 2 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 3 2 2 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 3 2 2 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2	6 LAB HRS. 0 0 0 3 0 3 0 0 3 0 0 3 0 0 3 0 0 9 2 1 4 8 HRS. 0 0 0 3 0 0 0 3 0 0 0 3 0 0 0 0 3 0	22 UNIT 2 3 3 3 3 3 3 3 3 3 3 3 3 3 1 3 3 3 1 3 3 25 UNIT 2 5 UNIT 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	PRE-REQUISITE None Nane Math 2 PhysE 1/Math 2 PhysE 1/Math 2 PhysE 1/Math 2 None GEC Elec 2 PhysE 1/Math 2 ChemE None PRE-REQUISITE None Calculus 1 ES 213 EE 213 ME 213	CO-REQUISITE None None None None None None None None
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STEM GRADUATE REVISED CURRICULUM

COURSE CODE	COURSE DESCRIPTION	LEC HRS.	LAB HRS.	UNIT	PRE-REQUISITE	CO-REQUISITED
ES 313	Mechanics of Deformable Bodies	3	0	3	ES 222	None
BES 4	Engineering Economics	3	0	3	None	None
EE 313	DC and AC Machinery	2	3	3	EE 213	None
VE 312	Heat Transfer	2	0	2	ME 223	None
WE 333	Fluid Mechanics	3	0	3	ME 223	None
VE313	Machine Flaments	2	3	3	ES 222	None
VE 332	Vibration Engineering	2	0	2	Math 4	None
WE 311	Computer Applications for ME	0	3	1	CpE 2	None
	Total	17	9	20		

THIRD YEAR - SE	ECOND SEMESTER		1		and the second sec	
COURSE CODE	COURSE DESCRIPTION	LEC HRS.	LAB HRS.	UNIT	PRE-REQUISITE	CO-REQUISITE
WE 321	Methods of Research for M.E.	1	0	1	Math 3	None
WE 323	Refrigeration Systems	3	. 0	3	ME 312	None
VE.343	Fluid Machineries	3	0	3	ME 333	None
ME 322	Combustion Engineering	2	0	2	ME 223	None
VE 363	Materials Science & Engineering for ME	2	3	3	ES 313/ChemE	None
VE 241	Mechanical Engineering Lab 1	0	3	1	ME 223	None
3B	Ethics	3	0	3	None	None
GE 5	Purposive Communication	3	0	3	None	None
IE Elec 1	Mechatronics Engineering	2	0	2	3rd-year Standing	None
	Total	19	6	21		

THIRD YEAR - SUMMER

COURSE CODE	COURSE DESCRIPTION	LEC MRS.	LAB MRS.	UNIT	PRE-REQUISITE	CO-REQUISITE
ME OJT	On the Job Training	0	240	3	4th-year Standing	None
	Total	0	240	3		

FOURTH YEAR - FIRST SEMESTER

COURSE CODE	COURSE DESCRIPTION	LEC HRS.	LAB HRS.	UNIT	PRE-REQUISITE	CO-REQUISITE
ME Elec 2	Heating, Ventilating, Airconditioning and Retrigeration	2	0	2	4th-year Standing	None
Research 1	ME Project Study 1	Û.	.3	1	ME 321	None
ME	Air-conditioning and Ventilation system	3	0	3	ME 323 Non	
ME 433	Control Engineering	2	3	3	ECE 223	None
ME 414	Power Plant Design with Renewable En	3	3	4	ME 322	None
ME 453	Machine Design 1	3	0	3	ME 313	None
BES 5	Techoprenuership 101	3	0	3	GEC Elec 2	None
ME 412	Mechanical Engineering Lab 2	0	6	2	ME 343 ME Lab 1	None
Prof. Enh. 1	ME Corelational course (MATH and ESAS)	3	0	3	4th year standing	None
	Total	19	15	24		

FOURTH YEAR - SECOND SEMESTER

COURSE CODE	COURSE DESCRIPTION	LEC HRS.	LAB HRS.	UNIT	PRE-REQUISITE	CO-REQUISITE
ME 424	Industrial Plant Engineering	3	3	4	ME 413	ME 442
Research 2	ME Project Study 2	0	3	1	Reseach 1	None
ME 423	Machine Design 2	2	3	3	ME 453	None
ME 443	Basic Occupational Safety and Health	3	0	3	None	None
ME 442	Manufacturing and Industrial Processes with Plant Visits	1	3	2	None	None
ME 422	Mechanical Engineering Lab 3	0	6	2	ME 414	None
ME 462	ME Laws, Ethics, Contracts, Codes and Standards	. 2	0	2	GE S	None
ME Elec 3	Energy Engineering and Management	2	0	2	4th-year Standing	None
Deaf Each 2	ME Corelational course	1 1			All an excition disc.	Alerea.

LICENSURE PASSERS







Graduates will pass the licensure examinations for mechanical engineers.



PERFORMANCE



Data retrieved from PRC Website @www.prc.gov.ph

HONING TECHNICAL EXPERTISE



Graduate will achieve a high level of technical expertise so that they are able to succeed in positions in mechanical engineering practice or research, and in other fields they choose to pursue.

PROGRAM EDUCATIONAL OBJECTIVE

HONING TECHNICAL EXPERTISE













Graduates will produce engineering designs that are based on sound principles that consider functionality, safety, cost-effectiveness and sustainability.







Graduates will pursue lifelong learning such as graduate studies and other professional education.



PROFESSIONAL AND COMMUNITY SERVICE



NwSSU Faculty as Energy Audit Consultants of DOST 8 at Gelomio Farm, Allen, Samar

Architects, Engineers and CAD Enthusiasts of Calbayog City Samar



Graduates will engage in professional service, such as participation in professional society and community service and will fulfill values, professional and ethical responsibilities in the practice of mechanical engineering, including social, environmental and economic considerations.

PROGRAM EDUCATIONAL

OBJECTIVE

LEADERS

POSITIONS OF BSME GRADUATES FOR THE LAST 5 YEARS	NUMBER OF GRADUATES	RME	NON RME
PROJECT ENGINEER	12	10	2
SITE ENGINEER	4	1	3
TECHNICAL ENGINEER	2	2	0
SITE INSPECTOR	2	2	0
QA/QC ENGINEER	2	1	1
SALES ENGINEER	2	1	1
FIELD ENGINEER	2	2	0
ENGINEERING ASSISTANT	1	1	0
ENGINEER 1	1	1	0
BUILDING ENGINEER	1	1	0
UNIVERSITY INSTRUCTOR	1	1	0
DESIGN ENGINEER	1	1	0
RETAIL ENGINEER	1	1	0
AOIC OPERATIONS AND LOGISTICS	1	1	0
GENSET OPERATOR	1	1	0
SHIFT ENGINEER			
TOTAL			DAIN





Graduates will be leaders, both in their chosen profession and in other activities.



LABORATORY CLASSES



NEW LABORATORY EQUIPMENT



SINGLE CYLINDER ENGINE TEST BED



FESTO REFRIGERATION TRAINING SYSTEM

PUMP TRAINING System



CEA ORGANIZATIONAL STRUCTURE

EL VATY CRISIC RODALES Failly Media





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Northwest Samar State University, Main Campus, Calbayog City COLLEGE OF ENGINEERING AND ARCHITECTURE **ORGANIZATIONAL STRUCTURE**



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@NWSSU_CET



PHILIPPINE SOCIETY OF MECHANICAL ENGINEERS (PSME - NWSSU STUDENT UNIT)



PSME-STUDENT CHAPTER LOOKBOOK









PSME LOOKBOOK