



RA 9299
NOPS (1907)

Republic of the Philippines
Negros Oriental State University
NOTS (1927) EVSAT (1956) CVPC (1983)
Kagawasan Ave., Dumaguete City, Negros Oriental, Philippines 6200

June 25, 2004

BACHELOR OF SCIENCE IN GEOTHERMAL ENGINEERING
Per NORSU BOR Res. No. 7, series of 1994
Effective School Year 2018-2019

FIRST YEAR

First Semester					
Subject	Descriptive Title	Lec	Lab	Total	Pre-req.
ENM 131	Engineering Calculus I	3		3	
EPS 131	Chemistry for Engineers	3	3	4	
ENS 131	Engineering Orientation (GE)	2		2	
GE 1	Understanding the Self	3		3	
GE 2	Readings in Philippine History	3		3	
GE 3	The Contemporary World	3		3	
PE 1	Physical Fitness and Health	2		2	
NSTP 1	National Service Training Program 1	3		3	
TOTAL		22	3	23	
*ENM 011	Algebra 1	2		2	
*ENM 012	Plane & Spherical Trigonometry	2		2	

* Enhancement courses for NON-STEM Senior High Graduates

Second Semester					
Subject	Descriptive Title	Lec	Lab	Total	Pre-req.
ENM 141	Engineering Calculus 2	3		3	ENM 131
EPS 141	Physics for Engineers	3	3	4	ENM 131
ENS 141	Engineering Drawing		3	1	
ENS 142	Computer Fund. & Programming	2	3	3	
GE 4	Mathematics in the Modern World	3		3	
GE 5	Purposive Communication	3		3	
PE 2	Recreational Games and Sports	2		2	
NSTP 2	National Service Training Program 2	3		3	
TOTAL		19	9	22	
*ENM 021	Algebra 2	2		2	
*ENM 022	Analytic Geometry w/ Solid Mensuration	2		2	

SECOND YEAR

First Semester					
Subject	Descriptive Title	Lec	Lab	Total	Pre-req.
ENM 231	Differential Equations	3		3	ENM141
ENS 231	Statics of Rigid Bodies	3		3	EPS141
ENS 232	Computer-Aided Design	1	3	2	
ENS 233	Environmental Science & Eng'g.	3		3	2nd yr standing
GE 231	Geothermal Systems, Resources & Technology	3		3	EPS131
ME 231	Thermodynamics 1	3		3	EPS141; ENM141
GE 230	Fundamentals in Surveying	3	3	4	
EE 230	Basic Electrical Engineering	2	3	3	EPS141; ENM141
PE 3	Rhythmic and Social Recreation	2		2	
TOTAL		23	9	26	

Second Semester					
Subject	Descriptive Title	Lec	Lab	Total	Pre-req.
ENM 241	Engineering Data Analysis	3		3	2nd yr standing
ENM 242	Advanced Eng'g. Mathematics	3		3	ENM231
ENS 240	Fund. of Mech. of Deformable Bodies	3		3	ENS231; ENM141
ENS 241	Dynamics of Rigid Bodies	3		3	ENS231
GE 241	Geothermal Geology	3		3	GE231
GE 242	Geothermal Geochemistry	3	3	4	GE231
GE 243	Geothermal Geophysics	3		3	GE231; EPS141
ME 241	Thermodynamics 2	3		3	ME231
PE 4	Cultural Presentation & Sports Management	2		2	
TOTAL		26	3	27	

THIRD YEAR

First Semester					
Subject	Descriptive Title	Lec	Lab	Total	Pre-req.
ENS 331	Engineering Economics	3		3	3rd yr standing
ENS 332	Fluid Mechanics	3		3	ENS 241, ME 241
GE 331	Geothermal Exploration Technology	2	3	3	GE 241, 242, 243
GE 332	Drilling	3		3	ME 231, GE 241, GE 242, GE 243
EE 330	AC / DC Machineries	2	3	3	EE 230
ECE 330	Basic Electronics	2	3	3	EE 230
ME 331	Heat Transfer	2		2	ME 241
GE 6	Art Appreciation	3		3	
FIL 1	Akademiko sa Wikang Filipino	3		3	
TOTAL		23	9	26	

Second Semester					
Subject	Descriptive Title	Lec	Lab	Total	Pre-req.
ENS 243	Technopreneurship	3		3	2nd yr standing
ENS 341	Research Methods for Engineering	3		3	ENM 241, GE 5
ENS 342	Material Science & Engineering	2	3	3	ENS 240, EPS 131
ENS 343	Engineering Management	3		3	3rd yr standing
GE 341	Geothermal Production Tech & FCRS Design	4		4	ENS 332, GE 231
GE 342	Well Testing and Measurement	3		3	GE 332, ME 231
GE 343	Reservoir Engineering	3	3	4	ENS 332, GE 342
GE 344	Corrosion Engineering	3		3	GE 242
GE 10A	Living in the IT Era	3		3	
TOTAL		27	6	29	

Summer					
Subject	Descriptive Title	Lec	Lab	Total	Pre-req.
GE 400	On-the-Job Training 300 hours	3	300	5	Completed all 3rd year Major Subjects

FOURTH YEAR

First Semester					
Subject	Descriptive Title	Lec	Lab	Total	Pre-req.
GE 431	GE Project Proposal	1	3	2	GE 400
GE 432	GE Power Plant Utilization	3		3	GE 341
GE 433	GE Power Plant Operation and Maintenance	3		3	GE 341
GE 434	GE Direct Utilization	3		3	GE 331
ME 433	Power Plant Design w/ Renewable Energy	4		4	ME 331
ME 434	Control Engineering & Lab	3	3	4	ECE 330
GE 7	Science, Technology & Society	3		3	
GE 8	Ethics	3		3	
TOTAL		23	6	25	

Second Semester					
Subject	Descriptive Title	Lec	Lab	Total	Pre-req.
ENS 441	Occupational Safety & Health	3		3	4th yr standing
GE 441	GE Project Study		6	2	GE 431
GE 442	Seminars and Field Trips		3	1	4th yr standing
GE 443	GE Laws, Contracts and Specification	3		3	4th yr standing
GE 9	Life & Works of Rizal	3		3	
GE 11	Gender and Society	3		3	
GE 12	Philippine Popular Culture	3		3	
TOTAL		15	9	18	

First Revision: August 2020

Summary:

NON TECHNICAL	53
General Education:	30
GE Elective/Mandated:	9
Physical Education:	8
NSTP:	6
TECHNICAL	148
Engineering Mathematics:	15
Natural/Physical Sciences	8
Engineering Sciences:	34
Allied Courses:	21
Professional Courses:	70
Total	201
Enhancement (for SHS Off-Track)	8