



BACHELOR OF ENGINEERING TECHNOLOGY

Major in METALLURGICAL and MATERIALS ENGINEERING TECHNOLOGY (BET-MMT)

(List of Courses by Semester)

BOR Resolution No. 129, Series of 2018

FIRST YEAR, First Semester

Course No.	Course Title	Units	Hours/Week			Pre-requisite(s)	Co-requisite(s)
			Le c	La b	Total		
GEC101	Understanding the Self	3	3	0	3	None	None
GEC104	Mathematics in the Modern World	3	3	0	3	None	None
CHM013	Chemistry 1	3	3	0	3	None	CHM013.2
CHM013.2	Chemistry 1 Laboratory	2	0	6	6	None	CHM013
BET111.2	Computer Aided Drafting for Manufacturing Laboratory	2	0	6	6	None	None
BET112	Basic Occupational, Health and Safety Engineering	3	3	0	3	None	None
BET113	Electricity	2	1	3	4	None	None
MET052.1	Workshop Theory and Practice	1	0	3	3	None	None
MMT111	Introduction to Metallurgy	3	3	0	3	None	CHM013
PED001	Exercise Prescription and Management	2	2	0	2	None	None
NST001	National Service Training Program 1	(3)	3	0	3	None	None
	TOTAL	24(27)	16	20	36		

FIRST YEAR, Second Semester

Course No.	Course Title	Units	Hours/Week			Pre-requisite(s)	Co-requisite(s)
			Le c	La b	Total		
GEC105	Readings in Philippine History	3	3	0	3	None	None
GEC102	Purposive Communication	3	3	0	3	None	None
BET117	Technology Awareness	2	2	0	2	None	None
MAT039	Calculus for Engineering Technologists 1	3	3	0	3	None	None
CHM014	Chemistry 2	3	3	0	3	CHM013, CHM013.2	CHM014.2
CHM014.2	Chemistry 2 Laboratory	2	0	6	6	CHM013, CHM013.2	CHM014
MMT121	Elements of Materials Science and Engineering	3	3	0	3	CHM013	None
MMT122	Materials Measurements	2	1	3	4	None	None
PED002	Dance/Martial Arts	2	2	0	2	PED001	None
NST002	National Service Training Program 2	(3)	3	0	3	NST001	None
	TOTAL	23(26)	21	11	32		



SECOND YEAR, First Semester

Course No.	Course Title	Units	Hours/Week			Pre-requisite(s)	Co-requisite(s)
			Le c	La b	Total		
GEC103	The Contemporary World	3	3	0	3	None	None
MAT040	Calculus for Engineering Technologists 2	3	3	0	3	MAT039	None
CHM023	Analytical Chemistry for Engineering Technologists 1	3	3	0	3	CHM014, CHM014.2	CHM023.2
CHM023.2	Analytical Chemistry for Engineering Technologists 1 Laboratory	2	0	6	6	CHM014, CHM014.2	CHM023
MMT131	Joining Technology	3	1	6	7	MMT111	None
MMT132	Mineral Processing Technology 1	3	3	0	3	MMT111	None
MMT133	Physical Metallurgy	3	2	3	5	MMT121	None
MMT134	Ceramics Technology	3	2	3	5	MMT121	None
PED003	Individual/Dual Sports/Traditional/Recreational Games	2	0	2	2	PED001	None
TOTAL		25	17	20	37		

SECOND YEAR, Second Semester

Course No.	Course Title	Units	Hours/Week			Pre-requisite(s)	Co-requisite(s)
			Le c	La b	Total		
HIS003	History of Filipino Muslims and Indigenous Peoples of MINSUPALA	3	3	0	3	None	None
PHY051	College Physics	3	3	0	3	None	(MAT040/MAT060), PHY051.1
PHY051.1	College Physics Laboratory	1	0	3	3	None	PHY051
BET118.1	Computer Applications Laboratory	1	0	3	3	None	None
BET120	Data Analysis	3	3	0	3	MAT039	None
MMT141	Mineral Processing Technology 2	3	3	0	3	MMT132	None
MMT142	Foundry Technology	3	3	0	3	MMT133	None
MMT143	Mechanical Working of Metals	3	2	3	5	MMT133	None
MMT144	Physical Chemistry of Materials	3	3	0	3	CHM023	None
PED004	Team Sports	2	0	2	2	PED001	None
TOTAL		25	20	14	34		



THIRD YEAR, First Semester

Course No.	Course Title	Units	Hours/Week			Pre-requisite(s)	Co-requisite(s)
			Lec	Lab	Total		
GEC108	Science, Technology and Society	3	3	0	3	None	None
FPE101	Fundamentals of Peace Education	3	3	0	3	None	None
BET116	Technical Writing	3	3	0	3	None	None
BET119	Engineering Mechanics	3	3	0	3	PHY 051	None
BET198	Research Methods	3	2	3	5	BET120	None
MMT151.1	Mineral Processing Technology 2 Laboratory	1	0	3	3	MMT141	None
MMT152.2	Foundry Technology Laboratory	2	0	6	6	MMT142	None
MMT153	Pyrometallurgy	3	2	3	5	MMT141, MMT144	None
MMT154	Hydrometallurgy and Electrometallurgy	3	2	3	5	MMT141	None
	TOTAL	24	18	18	36		

THIRD YEAR, Second Semester

Course No.	Course Title	Units	Hours/Week			Pre-requisite(s)	Co-requisite(s)
			Lec	Lab	Total		
GEC109	Life and Works of Rizal	3	3	0	3	None	None
ENS191	Engineering Economy	3	3	0	3	GEC104	ENS185/ BET120
ENS195	Environmental Sciences and Engineering with safety	3	3	0	3	(CHM012, CHM012.1) / (CHM013, CHM013.2) / (CHM018, CHM018.1)	None
GEC106	Art Appreciation	3	3	0	3	None	None
FIL101	Wika at Kultura sa Mapayapang Lipunan	3	3	0	3	None	None
MMT199	Undergraduate Thesis	3	1	6	7	BET198	None
MMT161	Plastics and Composites Technology	3	2	3	5	MMT121	None
MMT162	Semiconductors Technology	2	2	0	2	MMT121	None
	TOTAL	23	20	9	29		



FOURTH YEAR, First Semester

Course No.	Course Title	Units	Hours/Week			Pre-requisite(s)	Co-requisite(s)
			Lec	Lab	Total		
ENS193	Technopreneurship for Engineers and Technologists	3	3	0	3	ENS191	ENS192
GEC107	Ethics	3	3	0	3	None	None
FIL103	Inobasyon sa Wikang Pilipino	3	3	0	3	None	None
ENS192	Engineering Management	3	3	0	3	ENS191	ENS192
MMT171	Metallurgical Analysis	3	1	6	7	CHM023	None
MMT172.1	Field Trips and Seminar	1	0	3	3	MMT 141, MMT142, MMT153, MMT154	None
Elective 1	(Technical Elective 1)	3	2	3	5	(as the course requires)	(as the course requires)
Elective 2	(Technical Elective 2)	3	2	3	5	(as the course requires)	(as the course requires)
	TOTAL	22	17	15	32		

FOURTH YEAR, Second Semester

Course No.	Course Title	Units	Hours/Week			Pre-requisite(s)	Co-requisite(s)
			Lec	Lab	Total		
MMT197	On-the-Job Training	12	0	40	40	MMT171, MMT172.1	None
	TOTAL	12	0	40	40		

Graduated: Bachelor of Engineering Technology
major in Metallurgical and Materials Engineering Technology
Grand Total Units : 176 (182)

TECHNICAL ELECTIVES

Course No	Course Title	Units	Hours/week			Pre-requisite(s)	Co-requisite(s)
			Lec	Lab	Total		
MMT173	Standard Methods of Testing Engineering Materials	3	2	3	5	MMT133	None
MMT174	Fracture and Failure Analysis	3	2	3	5	MMT133	None
MMT175	Heat Treatment of Steel	3	2	3	5	MMT133	None
MMT176	Refractories, Fuels and Combustion	3	2	3	5	MMT153	None
MMT177	Cement Technology	3	2	3	5	MMT141	None
MMT178	Fusion Welding Technology	3	2	3	5	MMT131, MMT133	None
MMT179	Ceramics Production Technology	3	2	3	5	MMT134	None
MMT180	Corrosion and Degradation of Materials	3	2	3	5	MMT133	None