## Colegio de San Juan de Letran Calamba

Brgy. Bucal, City of Calamba, Laguna

## **BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING**

Curriculum Year 2022-2023

COURSE			Lec	La	ab	TOTAL	PRE-REQUISITES/
CODE	COURSE TITLE	_	Units/Hours	Units	Hrs		CO-REQUISITES
FIRST YEAR, Firs CHM083			2			2	Ol III Manual
CHM081L	Chemistry for Engineers Chemistry for Engineers Lab		3	1	3	3 1	co-req: CHM081L co-req: CHM083
DRW021L	Engineering Drawing			1	3	1	co-leq. Crivioss
GEC003	Understanding the Self		3	·	Ü	3	
GEC023	Mga Babasahin Hinggil sa Kasaysayan ng Pilipinas		3			3	
GEC033	Mathematics in the Modern World		3			3	
MATH153A	Calculus 1		3			3	
MATH323	Engineering Data Analysis		3			3	
NSTP1-18	National Service Training Program 1		3			3	
PATHFIT1002	Movement Competency Training		2			2	
=======================================		otal	23	2	6	25	
FIRST YEAR, Sec							
CoENG001L DRW051L	Computer Fundamentals and Programming Lab Computer Aided Drafting			1 1	3 3	1 1	DDWood
FIL083	Komunikasyon sa Akademikong Filipino		3	'	3	3	DRW021L
GEC013	Science, Technology, and Society		3			3	
GEC063	Purposive Communication		3			3	
LQEC543	Letran Quality Enrichment Course 54		3			3	
MATH153B	Calculus 2		3			3	MATH153A
ME001-18	Orientation to ME		1			1	
ME001L	Workshop Theory & Practice Lab			1	3	1	
NSTP2-18	National Service Training Program 2		3			3	NSTP1-18
PATHFIT2022	Exercise-Based Fitness		2			2	PATHFIT1002
PHY083	Physics for Engineers		3			3	MATH153A; co-req: PHY081L
PHY081L	Physics for Engineers Lab			1	3	1	MATH153A; co-req: PHY083
RELED051	The Catholic Christian Faith		1			1	
SECOND VEAR		otal	25	4	12	29	
SECOND YEAR, F CoENG041L	Computer Applications for ME			1	3	1	CoENG001L
EE012B	Basic Electrical Engineering		2	'	3	2	Phy083, Phy081L; co-req: EE011B-L
EE011B-L	Basic Electrical Engineering Lab		_	1	3	1	Phy083, Phy081L; co-req: EE012B
ENGG003	Statics of Rigid Bodies		3	•	Ü	3	MATH153B, Phy083, Phy081L
FIL093	Pagbasa at Pagsulat Tungo sa Pananaliksik		3			3	FIL083
GEC073	Ethics		3			3	
LQEC553	Letran Quality Enrichment Course 55		3			3	LQEC543
MATH223	Differential Equations		3			3	MATH153B
ME002L	Machine Shop Theory and Practice Lab			2	6	2	ME001L
ME032C	Machine Elements		2			2	Drw051L, Phy083, Phy081L; co-req: ME031C-L
ME031C-L	Machine Elements Lab			1	3	1	Drw051L, Phy083, Phy081L; co-req: ME032C
ME043C	Thermodynamics I		3			3	Phy083, Phy081L
PATHFIT3032	Individual/Dual Sports		2	_		2	PATHFIT1002, PATHFIT2022
SECOND YEAR, S		otal	24	5	15	29	
EE062B	Basic Electronics		2			2	EE012B, EE011B-L; co-req: EE061B-L
EE061B-L	Basic Electronics Lab		_	1	3	1	EE012B, EE011B-L; co-req: EE062B
ENGG002	Dynamics of Rigid Bodies		2	•	Ü	2	ENGG003; co req ENGG063
ENGG063	Mechanics of Deformable Bodies		3			3	ENGG003; co req ENGG002
ENGG112	Engineering Management		2			2	GEC073
FIL113	Panitikang Filipino		3			3	FIL093
ME043D	Thermodynamics II		3			3	ME043C
ME071B-L1	Mechanical Engineering Lab I			1	3	1	ME002L
ME092B	Heat Transfer		2			2	ME043C
PATHFIT4042	Contemporary Dance		2			2	PATHFIT1002, PATHFIT2022
RELED063	Contemporary Issues in Christian Marriage	_	3			3	RELED051
SECOND VEAR		otal	22	2	6	24	_
SECOND YEAR, II EE022C	nter-Semester  DC and AC Machinery		2			2	FE012R FE011RJ : co ros: FE021C !
EE021C-L	DC and AC Machinery  DC and AC Machinery Lab		4	1	3	1	EE012B, EE011B-L; co-req: EE021C-L EE012B, EE011B-L; co-req: EE022C
MATHME253	Advanced Engineering Math for ME		3		J	3	MATH223
	-	otal	5	1	3	6	
THIRD YEAR, Firs							
ENGG093	Fluid Mechanics		3			3	ME043D
GEC043	The Contemporary World		3			3	
GEC053	Art Appreciation		3			3	
ME052B	Material Science & Engineering for ME		2			2	ENGG063; co-req: ME051B-L
ME051B-L	Material Science & Engineering for ME Lab			1	3	1	ENGG063; co-req: ME052B
ME063C	Machine Design I		3			3	ENGG063, ME032C, ME031C-L
ME072B-L2	Mechanical Engineering Lab II		_	2	6	2	ME071B-L1
ME113B	Refrigeration Systems		3			3	ME092B
RELED073	Contemporary Issues about Church and Human Society with Immer	rsion	3			3	RELED051
RZL023	Buhay at Mga Akda ni Rizal	Total	3 <b>23</b>	3	9	3 26	
	,	Jul	25	3	3	20	

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Brgy. Bucal, City of Calamba, Laguna

## **BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING**

Curriculum Year 2022-2023

COURSE	COURSE TITLE		Lec	_	<b>ab</b> Hrs	TOTAL	PRE-REQUISITES/ CO-REQUISITES
THIRD YEAR, Sec			Jilita/Tioura	OTILO	1113		
ENGG103	Engineering Economics		3			3	co req , ENGG193, ME-PS1
ENGG183	Basic Occupational Safety and Health		3			3	GEC013, GEC043
ENGG193	Technopreneurship		3			3	co req ENGG103
ME101A	Methods of Research for ME		1			1	co req ME-PS1
ME062D	Machine Design II		2			2	ME063C; co req ME061D-L
ME061D-L	Machine Design II Lab			1	3	1	ME063C; co req ME062D
ME082B	Combustion Engineering		2			2	ME092B
ME123A	Fluid Machineries		3			3	ENGG093; co req ME-PS1
ME132B	Vibration Engineering		2			2	MATHME253
ME143C	Airconditioning and Ventilation Systems		3			3	ME113B
ME153A	Industrial Plant Engineering and Design		3			3	ENGG093, ME071B-L1, ME092B; co req ME151A-L
ME151A-L	Industrial Plant Engineering and Design Lab			1	3	1	ENGG093, ME071B-L1, ME092B; co req ME153A
ME-PS1	ME Project Study I			1	3	1	ME063C, ME113B; co-req ENGG103, ME101A, ME123A
	-	otal	25	3	9	28	
THIRD YEAR, Inte							
ME221	*Manufacturing & Industrial Processes with Plant Visit		1			1	ME153A, ME151A-L; co-req: ME221L
ME221L	*Manufacturing & Industrial Processes with Plant Visit Lab			1	3	1	ME153A, ME151A-L; co-req: ME221
FOURTH VEAR	<del>-</del>	otal	1	1	3	2	
FOURTH YEAR, F							
ME072B-L3	Mechanical Engineering Lab III		_	2	6	2	ME072B-L2, ME143C; co req ME193, ME191L
ME182A	ME Laws, Ethics, Codes, and Standards		2			2	ENGG193
ME193	Power Plant Design with Renewable Energy		3			3	ME153A, ME151A-L; co req ME072B-L3, ME191L
ME191L	Power Plant Design with Renewable Energy Lab			1	3	1	ME153A, ME151A-L; co req ME072B-L3, ME193
ME262	Control Engineering		2			2	EE062B, EE061B-L, ME072B-L2; co-req: ME261L
ME261L	Control Engineering Lab			1	3	1	EE062B, EE061B-L, ME072B-L2; co-req: ME262
ME-PS2	ME Project Study II		_	1	3	1	ME-PS1
FOURTH VEAR		otal	7	5	15	12	
FOURTH YEAR, S	Second Semester						ME-PS2,ME182A,ME262,ME261L,LQEC553,ME193,
ME-ELEC1	Solar Energy and Wind Energy Utilization		3			3	ME191L co req ME-ELEC2,ME-ST006 ME-PS2,ME182A,ME262,ME261L,LQEC553,ME193,
ME-ELEC2	Energy Management System in Building		3			3	ME191L co req ME-ELEC1,ME-ST006
ME-ST006	Special Topics for ME		6			6	ME-PS2,ME182A,ME262,ME261L,LQEC553,ME193, ME191L co req ME-ELEC1,ME-ELEC2
	Τ	Total	12			12	
	GRAND TOT	ΓAL	167	26	78	193	

<sup>\*</sup>OJT (300 hrs) may be substituted for Manufacturing & Industrial Processes with Plant Visit (ME221) and Manufacturing & Industrial Processes with Plant Visit Laboratory (ME221L).

jrd/04182022