

# Colegio de San Juan de Letran Calamba

Brgy. Bucal, City of Calamba, Laguna

## BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Curriculum Year 2023-2024

COURSE CODE	COURSE TITLE	Lec	Lab		TOTAL	PRE-REQUISITES/ CO-REQUISITES
		Units/Hours	Units	Hrs		
<b>FIRST YEAR, First Semester</b>						
CHM081L	Chemistry for Engineers Lab		1	3	1	co-req CHM083
CHM083	Chemistry for Engineers	3			3	co-req CHM081L
DRW021L	Engineering Drawing		1	3	1	
GEC013	Science, Technology, and Society	3			3	
LQEC23-013	Letran Quality Enhancement Course I (Letran Calamba Identity and 21st Century Learning Skills)	3			3	
MATH153A	Calculus 1	3			3	
MATH343A	Engineering Mathematics 1	3			3	
ME001-18	Orientation to ME	1			1	
NSTP1-18	National Service Training Program 1	3			3	
PATHFIT1002	Movement Competency Training	2			2	
	<b>Total</b>	<b>21</b>	<b>2</b>	<b>6</b>	<b>23</b>	
<b>FIRST YEAR, Second Semester</b>						
DRW051L	Computer Aided Drafting		1	3	1	DRW021L
GEC023	Mga Babasahin Hinggil sa Kasaysayan ng Pilipinas	3			3	
GEC033	Mathematics in the Modern World	3			3	
MATH153B	Calculus 2	3			3	MATH153A, co-req PHY083, PHY081L
MATH343B	Engineering Mathematics 2	3			3	MATH343A
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
PHY081L	Physics for Engineers Lab		1	3	1	MATH153A, co-req PHY083, MATH153B
PHY083	Physics for Engineers	3			3	MATH153A, co-req PHY081L, MATH153B
RELED053	The Catholic Christian Faith	3			3	
	<b>Total</b>	<b>23</b>	<b>3</b>	<b>9</b>	<b>26</b>	
<b>SECOND YEAR, First Semester</b>						
EE011B-L	Basic Electrical Engineering Lab		1	3	1	Phy083, Phy081L, co-req: EE012B
EE012B	Basic Electrical Engineering	2			2	Phy083, Phy081L, co-req: EE011B-L
ENGG003	Statics of Rigid Bodies	3			3	MATH153B, Phy083, Phy081L
GEC003	Understanding the Self	3			3	
LQEC23-023	Letran Quality Enrichment Course II (21st Century Literacy Skills & Life Skills and Sustainability)	3			3	LQEC23-013
MATH223	Differential Equations	3			3	MATH153B
ME002L	Machine Shop Theory and Practice		2	6	2	ME001L
ME031C-L	Machine Elements Lab		1	3	1	Drw051L,Phy083,Phy081L; co-req: ME032C
ME032C	Machine Elements	2			2	Drw051L,Phy083,Phy081L; co-req: ME031C-L
ME043C	Thermodynamics I	3			3	MATH153B, Phy083, Phy081L
PATHFIT3032	Individual /Dual Sports	2			2	PATHFIT1002, PATHFIT2022
RELED063	Contemporary Issues in Christian Marriage	3			3	RELED053
	<b>Total</b>	<b>24</b>	<b>4</b>	<b>12</b>	<b>28</b>	
<b>SECOND YEAR, Second Semester</b>						
CoENG001L	Computer Fundamentals and Programming		1	3	1	
EE061B-L	Basic Electronics Lab		1	3	1	EE012B, EE011B-L, co-req: EE062B
EE062B	Basic Electronics	2			2	EE012B, EE011B-L, co-req: EE061B-L
ENGG002	Dynamics of Rigid Bodies	2			2	ENGG003
ENGG064	Mechanics of Deformable Bodies	4			4	ENGG003
GEC063	Purposive Communication	3			3	
GEC073	Ethics	3			3	
ME043D	Thermodynamics II	3			3	ME043C, co-req: ME071B-L1
ME071B-L1	Mechanical Engineering Lab I		1	3	1	ME002L, co-req: ME043D
ME092B	Heat Transfer	2			2	ME043C
PATHFIT4042	Contemporary Dance	2			2	PATHFIT1002, PATHFIT2022
RELED083	Christian Ethics	3			3	RELED053
	<b>Total</b>	<b>24</b>	<b>3</b>	<b>9</b>	<b>27</b>	
<b>SECOND YEAR, Inter-Semester</b>						
ENGG103	Engineering Economics	3			3	MATH153A
ENGG112	Engineering Management	2			2	
MATHME253	Advanced Engineering Math for ME	3			3	MATH223
	<b>Total</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>8</b>	

COURSE CODE	COURSE TITLE	Lec	Lab		TOTAL	PRE-REQUISITES/ CO-REQUISITES
		Units/Hours	Units	Hrs		
<b>THIRD YEAR, First Semester</b>						
EE021C-L	DC and AC Machinery Lab		1	3	1	EE012B, EE011B-L, co-req EE022C
EE022C	DC and AC Machinery	2			2	EE012B, EE011B-L, co-req EE021C-L
GECELEC1	Living in the IT Era	3			3	
GECELEC3	Philippine Popular Culture	3			3	
MATH323	Engineering Data Analysis	3			3	MATH153A
ME051B-L	Material Science & Engineering for ME Lab		1	3	1	ENGG064, CHM083, CHM081L, co-req ME052B
ME052B	Material Science & Engineering for ME	2			2	ENGG064, CHM083, CHM081L, co-req ME051B-L
ME063C	Machine Design I	3			3	ENGG064, ME032C, ME031C-L
ME072B-L2	Mechanical Engineering Lab II		2	6	2	ME071B-L1
ME082B	Combustion Engineering	2			2	ME092B, ME043D
ME113B	Refrigeration Systems	3			3	ME092B, ME043D
RELED073	Contemporary Issues in about Church and Human Society with Immersion	3			3	RELED053
	<b>Total</b>	<b>24</b>	<b>4</b>	<b>12</b>	<b>28</b>	
<b>THIRD YEAR, Second Semester</b>						
CoENG041L	Computer Applications for ME		1	3	1	CoENG001L
ENGG093	Fluid Mechanics	3			3	ME043D
GECELEC2	The Entrepreneurial Mind	3			3	
ME061D-L	Machine Design II Lab		1	3	1	ME063C, co-req ME062D
ME062D	Machine Design II	2			2	ME063C, co-req ME061D-L
ME072B-L3	Mechanical Engineering Lab III		2	6	2	ME072B-L2
ME102-23	Methods of Research for ME	2			2	co-req ME-PS1
ME143C	Airconditioning and Ventilation Systems	3			3	ME113B
ME151A-L	Industrial Plant Engineering and Design Lab		1	3	1	ME072B-L2, ME082B, ME113B co-req ME153A
ME153A	Industrial Plant Engineering and Design	3			3	ME072B-L2, ME082B, ME113B co-req ME151A-L ME063C, ME082B, ME113B, ME072B-L2 co-req ME102-23
ME-PS1	ME Project Study I		1	3	1	
RZL023	Buhay at Mga Akda ni Rizal	3			3	
	<b>Total</b>	<b>19</b>	<b>6</b>	<b>18</b>	<b>25</b>	
<b>THIRD YEAR, Inter-Semester</b>						
ENGG183	Basic Occupational Safety and Health	3			3	
ENGG193	Technopreneurship	3			3	GECELEC2
ME123A	Fluid Machineries	3			3	ENGG093
	<b>Total</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>9</b>	
<b>FOURTH YEAR, First Semester</b>						
GEC043	The Contemporary World	3			3	
GEC053	Art Appreciation	3			3	
ME132B	Vibration Engineering	2			2	MATHME253
ME191L	Power Plant Design with Renewable Energy Lab		1	3	1	ME153A, ME151A-L co-req ME193
ME193	Power Plant Design with Renewable Energy	3			3	ME153A, ME151A-L co-req ME191L
ME261L	Control Engineering Lab		1	3	1	EE062B, EE061B-L, co-req ME262
ME262	Control Engineering	2			2	EE062B, EE061B-L, co-req ME261L
ME-ELEC1	ME Elective 1	3			3	ME153A, ME151A-L co-req ME-ELEC2
ME-ELEC2	ME Elective 2	3			3	ME153A, ME151A-L co-req ME-ELEC1
ME-PS2	ME Project Study II		1	3	1	ME-PS1
	<b>Total</b>	<b>19</b>	<b>3</b>	<b>9</b>	<b>22</b>	
<b>FOURTH YEAR, Second Semester</b>						
ME182A	ME Laws, Ethics, Codes, and Standards	2			2	GEC073
ME221	*Manufacturing & Industrial Processes with Plant Visit	1			1	ME193, ME191L co-req: ME221L
ME221L	*Manufacturing & Industrial Processes with Plant Visit Lab		1	3	1	ME193, ME191L co-req: ME221
ME-ST006	Special Topics for ME	6			6	ME193, ME191L
	<b>Total</b>	<b>9</b>	<b>1</b>	<b>3</b>	<b>10</b>	
	<b>GRAND TOTAL</b>	<b>180</b>	<b>26</b>	<b>78</b>	<b>206</b>	

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

jrd/03062023

Reviewed and Noted by:



ENGR. CHRISTOPHER V. GONZALES, PCpE  
CpE Chair/Acting Dean