

**Major Required Courses
Bachelor of Science in Industrial Engineering (BSIE)**

==== July 2022 ====



Compulsory Courses			
Course Code	Course Title	Credits Hours	Pre-Requisites
ENR 201	Engineering Drawing and CAD	3	ENG 101
MEG 211	Fundamentals of Materials Engineering	3	CHM 101, PHY 103
IEG 201	Introduction to Engineering Design	2	ENR 201
IEG 301	Design of Experiments	3	STT 103
IEG 302	Engineering Reliability	2	IEG 301, MTH 204
IEG 303	Quality Control	3	IEG 201, IEG 301
IEG 304	Engineering Economy and Costing	3	MTH 304
IEG 311	Production and Inventory Systems	3	STT 103
IEG 312	Operation Management	3	IEG 311
IEG 321	Operation Research-1	3	MTH 301, CIS 103
IEG 322	Operation Research-2	3	IEG 321
IEG 323	Systems Simulation	3	IEG 321
IEG 332	Work Design and Analysis	3	IE 342
IEG 341	Manufacturing Processes-1	3	MEG 211
IEG 342	Manufacturing Processes-2	3	IEG 341
IEG 345	Industrial Control Systems and Automation	3	CIS 103, PHY 203
IEG 351	Manufacturing Systems	3	IEG 302, IEG 342
IEG 400	Product Development and Innovation	3	IEG 201, IEG 303
IEG 411	Project Management	3	IEG 312, IEG 304
IEG 431	Ergonomics	3	IEG 332
IEG 450	Industrial Facility Design and Material Handling	3	IEG 332, IEG 322
IEG 490	Graduation Design Project-1	2	IEG 303, Pass 80 Cr. Hrs
IEG 491	Graduation Design Project-2	2	IEG 490
IEG 497	CO-OP Practical Training	6	Pass 90 Cr. Hrs
CSK001	Career Skills	-	-
Elective Courses			
IEG 403	Six Sigma and Lean Operations	3	IEG 301, IEG 303
IEG 413	Supply Chain	3	IEG 312
IEG 414	Production System Operations	3	IEG 312
IEG 430	Safety Engineering	3	IEG 431
IEG 433	Ergonomic Design	3	IEG 431, IEG 332
IEG 446	Direct Digital Manufacturing	3	IEG 342
IEG 447	Computer Integrated Manufacturing	3	IEG 345
MIS 312	Data Management	3	CIS 103, IEG 342