MINISTÉRIO DA EDUCAÇÃO
UNIVERSIDADE FEDERAL DE OURO PRETO
PRÓ-REITORIA DE GRADUAÇÃO

UFOP

COURSE OF PRODUCTION ENGINEERING - 2026/2(curriculum 1)

OURO PRETO'S CAMPUS

CODE	MANDATORY DISCIPLINES	PREREQUISITE	SWL/EWL	CWL	CLASSES		SEM
					T	P	
BCC701	COMPUTER PROGRAMMING I		60/0	72	2	2	1
MTM700	DIFFERENTIAL AND INTEGRAL CALCULUS A		60/0	72	4	0	1
MTM730	ANALYTICAL GEOMETRY AND LINEAR ALGEBRA		60/0	72	4	0	1
PRO106	SEMINAR AND STUDIES IN PRODUCTION ENGINEERING		30/0	36	2	0	1
PRO717	LABOR ENGINEERING		60/0	72	2	2	1
QUI701	FUNDAMENTAL CHEMISTRY		60/0	72	2	2	1
ARQ700	GRAPHIC EXPRESSION I		60/0	72	2	2	2
BCC702	COMPUTER PROGRAMMING II		60/0	72	2	2	2
FIS106	FUNDAMENTALS OF MECHANICS		60/0	72	4	0	2
MTM702	DIFFERENTIAL AND INTEGRAL CALCULUS B		60/0	72	4	0	2
PRO718	ERGONOMICS AND LABOR		60/0	72	3	1	2
FIS107	FUNDAMENTALS OF THERMODYNAMICS		30/0	36	2	0	3
FIS108	FUNDAMENTALS OF FLUIDS, OSCILLATIONS AND WAVES		30/0	36	2	0	3
MTM703	DIFFERENTIAL AND INTEGRAL CALCULUS C		60/0	72	4	0	3
PRO227	MICROECONOMICS		60/0	72	4	0	3
PRO309	ENGINEERING STOCHASTIC METHODS I		60/0	72	4	0	3
PRO701	MATHEMATICAL ENGINEERING METHODS I		60/0	72	4	0	3
FIS109	FUNDAMENTALS OF ELECTROMAGNETISM		60/0	72	4	0	4
FIS214	RATIONAL MECHANICS		60/0	72	2	2	4
PRO226	MACROECONOMICS		60/0	72	4	0	4
PRO404	ENGINEERING STOCHASTIC METHODS II		60/0	72	3	1	4
PRO704	MATHEMATICAL ENGINEERING METHODS II		60/0	72	4	0	4
BCC760	NUMERICAL CALCULUS		60/0	72	2	2	5
FIS105	FUNDAMENTALS OF EXPERIMENTAL PHYSICS		30/0	36	0	2	5
FIS110	FUNDAMENTALS OF OPTICS AND QUANTUM MECHANICS		30/0	36	2	0	5
FIS215	CONTINUUM MECHANICS		60/0	72	4	0	5
PRO511	ORGANIZATIONAL THEORY		60/0	72	4	0	5
PRO706	OPERATIONAL RESEARCH I		60/0	72	2	2	5
CAT700	AUTOMATION OF PRODUCTION SYSTEMS		60/0	72	4	0	6
PRO126	ENERGY, SOCIETY AND ENVIRONMENT		60/0	72	4	0	6
PRO236	CONTINUOUS PROCESS ENGINEERING		60/0	72	4	0	6
PRO708	OPERATIONAL RESEARCH II		60/0	72	2	2	6
PRO720	SCIENCE AND MANUFACTURE		60/0	72	4	0	6
CAT107	INDUSTRIAL FACILITIES		60/0	72	2	2	7
PRO390	SUPERVISED INTERNSHIP	900 hours	180/0	180	0	1	7
PRO721	MANUFACTURE ENGINEERING		60/0	72	4	0	7
PRO723	QUALITY ENGINEERING		60/0	72	3	1	7
PRO807	PLANNING AND PRODUCTION CONTROL		60/0	72	4	0	7
PRO809	ECONOMIC ENGINEERING		60/0	72	4	0	7
PRO490	FINAL RESEARCH PROJECT	2100 hours	60/0	72	4	0	8
PRO710	SCIENCE, TECHNOLOGY, AND SOCIETY		60/0	72	4	0	8
PRO716	PROCESSES ENGINEERING, RISKS, AND LOSS PREVENTION		60/0	72	4	0	8
PRO724	LOGISTICS		60/0	72	4	0	8
PRO725	INFORMATION ENGINEERING		60/0	72	3	1	8
PRO808	PRODUCT ENGINEERING		60/0	72	3	1	8
PRO491	UNDERGRADUATE THESIS	PRO490	60/0	72	4	0	9
PRO714	INDUSTRIAL ECONOMICS		60/0	72	4	0	9
PRO910	PLANNING AND PRODUCTION MANAGEMENT		60/0	72	4	0	9
PRO909	STRATEGIC HUMAN RESOURCES		60/0	72	4	0	10
PRO920	FACTORY PROJECT		60/0	72	4	0	10

SWL – SEMESTER WORKLOAD IN HOURS; EWL – EXTENSION WORKLOAD IN HOURS; CWL - 50 MINUTE CLASS WORKLOAD; P - PRACTICAL CLASSES; T - THEORY CLASSES; SEM - SEMESTER

CODE	ELECTIVE DISCIPLINES	PREREQUISITE	SWL/EWL	CWL	CLASSES		SEM
					T	P	
LET966	INTRODUCTION TO THE BRAZILIAN SIGN LANGUAGE		60/0	72	2	2	
PRO310	ECONOMIC ENGINEERING II	PRO706 PRO809	60/0	72	2	2	
PRO329	ADMINISTRATION: STRUCTURE AND PROCESS	PRO511	60/0	72	4	0	
PRO330	CORPORATE GOVERNANCE	PRO511	60/0	72	4	0	
PRO335	BRAZILIAN ENERGY POLICY	PRO126	60/0	72	4	0	
PRO336	ENERGY ECONOMY	PRO126 PRO226 PRO227	60/0	72	4	0	
PRO345	MARKETING ADMINISTRATION	PRO511	60/0	72	4	0	
PRO346	FINANCIAL ENGINEERING	PRO809	60/0	72	4	0	
PRO374	SUPPLY CHAIN MANAGEMENT	PRO724	60/0	72	4	0	
PRO376	ELECTRIC POWER	PRO126	60/0	72	4	0	
PRO503	HISTORY OF ECONOMIC THOUGHT	PRO226 PRO227	60/0	72	4	0	
PRO504	ECONOMIC DEVELOPMENT	PRO226 PRO227	60/0	72	4	0	
PRO505	INVESTMENTS ANALYSIS	PRO809	60/0	72	3	1	
PRO508	OPERATIONAL RESEARCH APPLIED TO ECONOMIC ENGINEERING	PRO706 PRO809	60/0	72	2	2	
PRO509	FINANCIAL ADMINISTRATION	PRO511 PRO809	60/0	72	3	1	
PRO526	GAME THEORY	MTM730	60/0	72	4	0	
PRO527	GRAPHS THEORY	MTM700 MTM730	60/0	72	4	0	
PRO528	MATHEMATICAL MODELS APPLIED TO INVENTORY MANAGEMENT	PRO807	60/0	72	3	1	
PRO530	MATHEMATICAL MODELING FOR PRODUCTION SEQUENCING	PRO706 PRO708	60/0	72	2	2	
PRO550	OIL AND NATURAL GAS	PRO126	60/0	72	4	0	
PRO551	BIOMASS ENERGY	PRO126	60/0	72	4	0	
PRO553	ENERGY AND CLIMATE CHANGE	PRO126	60/0	72	4	0	
PRO556	INTEGRATED ENERGY PLANNING	PRO126 PRO706	60/0	72	4	0	
PRO562	ENERGY EFFICIENCY AND CONSERVATION	PRO126	60/0	72	4	0	
PRO563	ENERGY ENGINEERING	PRO126	60/0	72	4	0	
PRO564	POWER SYSTEMS CO-GENERATION	PRO126	60/0	72	4	0	
PRO565	ENERGY SYSTEMS PLANNING AND EVALUATION	PRO126	60/0	72	4	0	
PRO566	ADVANCED COMPUTATIONAL METHODS IN PRODUCTION ENGINEERING	BCC702 PRO404 PRO704	60/0	72	2	2	
PRO571	STOCHASTIC MODELING AND ADVANCED SIMULATION	PRO404 PRO706	60/0	72	2	2	
PRO572	OPTIMIZATION AND LOGISTICS	PRO706 PRO724	60/0	72	2	2	
PRO602	ERGOLOGY AND LABOR	PRO717 PRO718	60/0	72	4	0	
PRO603	SUSTAINABILITY IN PRODUCT DEVELOPMENT	PRO808	60/0	72	4	0	
PRO604	SERVICES ENGINEERING	PRO725 PRO807	60/0	72	4	0	
PRO605	STRATEGY AND PLANNING	PRO511	60/0	72	4	0	
PRO606	PROJECT AND LOGISTICS MANAGEMENT	PRO724	60/0	72	4	0	
PRO607	INNOVATION AND ENTREPRENEURSHIP	PRO710 PRO725	60/0	72	4	0	
PRO608	SUSTAINABILITY AND TECHNOLOGICAL DEVELOPMENT	PRO126 PRO710	60/0	72	4	0	
PRO609	SOCIAL ENGINEERING	PRO226 PRO717	60/0	72	4	0	
PRO630	MONETARY AND FINANCIAL ECONOMICS	PRO226 PRO227	60/0	72	4	0	
PRO631	ENVIRONMENT ECONOMICS	PRO226 PRO227	60/0	72	4	0	
PRO632	ECONOMICS OF INNOVATION	PRO226 PRO227	60/0	72	4	0	
PRO633	NATURAL RESOURCES ECONOMICS	PRO226 PRO227	60/0	72	4	0	
PRO634	REGIONAL AND URBAN ECONOMICS	PRO226 PRO227	60/0	72	4	0	
PRO635	BRAZILIAN ECONOMY	PRO226 PRO227	60/0	72	4	0	
PRO636	ENGINEERING STOCHASTIC METHODS III	PRO309 PRO404	60/0	72	2	2	
PRO637	ENGINEERING STOCHASTIC METHODS IV	PRO309 PRO404	60/0	72	2	2	
PRO639	OPTIMIZATION METHODS FOR LARGE-SCALE SYSTEMS	PRO706 PRO708	60/0	72	2	2	
PRO640	COMPUTATIONAL INTELLIGENCE AND OPTIMIZATION	PRO706 PRO708	60/0	72	2	2	
PRO641	DECISION SUPPORT METHODS APPLIED TO SERVICE OPERATIONS	PRO706 PRO708	60/0	72	2	2	
PRO642	DECISION SUPPORT METHODS APPLIED TO PRODUCTION PLANNING	PRO706 PRO708	60/0	72	2	2	
PRO643	MATHEMATICAL ENGINEERING METHODS III	PRO701 PRO704	60/0	72	2	2	
PRO810	ENERGY AND CLIMATE CHANGE	PRO126	60/0	72	2	2	
PRO811	ENERGY, ENVIRONMENT AND SOCIETY		60/0	72	4	0	
PRO812	ENERGY ECONOMICS		60/0	72	4	0	

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					T	P	
PRO813	INTEGRATED ENERGY PLANNING		60/0	72	2	2	

CODE	ACTIVITIES	PREREQUISITE	CHARACTER	SWL	SEM
ATV100	ACADEMIC-SCIENTIFIC-CULTURAL ACTIVITY		MANDATORY	420	

Required Courses Load		Work Load
Mandatory Disciplines		2970
Elective Disciplines		360
Optative Disciplines		0
Facultative Disciplines		0
Activities		420
Extensions		0
	Total	3750

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