



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



COURSE OF PRODUCTION ENGINEERING - 2020/1(curriculum 1)
OURO PRETO'S CAMPUS

CODE	MANDATORY DISCIPLINES	PREREQUISITE	SWL	CWL	CLASSES		SEM
					T	P	
BCC701	COMPUTER PROGRAMMING I		60	72	2	2	1
MTM700	DIFFERENTIAL AND INTEGRAL CALCULUS A		60	72	4	0	1
MTM730	ANALYTIC GEOMETRY AND LINEAR ALGEBRA		60	72	4	0	1
PRO106	SEMINAR AND PRODUCTION ENGINEERING STUDIES		30	36	2	0	1
PRO717	WORK ENGINEERING		60	72	2	2	1
QUI701	FUNDAMENTAL CHEMISTRY		60	72	2	2	1
ARQ700	GRAPHIC EXPRESSION I		60	72	4	0	2
BCC702	COMPUTER PROGRAMMING II		60	72	2	2	2
FIS130	PHYSICS I		60	72	3	1	2
MTM702	DIFFERENTIAL AND INTEGRAL CALCULUS B		60	72	4	0	2
PRO718	ERGONOMICS AND LABOR		60	72	3	1	2
FIS131	PHYSICS II		60	72	3	1	3
MTM703	DIFFERENTIAL AND INTEGRAL CALCULUS C		60	72	4	0	3
PRO227	MICROECONOMICS		60	72	4	0	3
PRO309	ENGINEERING STOCHASTIC METHODS I		60	72	4	0	3
PRO701	MATHEMATICAL ENGINEERING METHODS I		60	72	4	0	3
FIS132	PHYSICS III		60	72	3	1	4
FIS214	RATIONAL MECHANICS		60	72	2	2	4
PRO226	MACROECONOMICS		60	72	4	0	4
PRO404	ENGINEERING STOCHASTIC METHODS II		60	72	3	1	4
PRO704	MATHEMATICAL ENGINEERING METHODS II		60	72	4	0	4
BCC760	NUMERICAL CALCULUS		60	72	2	2	5
FIS133	PHYSICS IV		60	72	3	1	5
FIS215	CONTINUUM MECHANICS		60	72	4	0	5
PRO511	ORGANIZATIONAL THEORY		60	72	4	0	5
PRO706	OPERATIONAL RESEARCH I		60	72	2	2	5
CAT700	PRODUCTION SYSTEMS AUTOMATION		60	72	4	0	6
PRO126	ENERGY, SOCIETY AND ENVIRONMENT		60	72	4	0	6
PRO236	CONTINUOUS PROCESS ENGINEERING		60	72	4	0	6
PRO708	OPERATIONAL RESEARCH II		60	72	2	2	6
PRO720	MANUFACTURING AND SCIENCE		60	72	4	0	6
CAT107	INDUSTRIAL FACILITIES		60	72	2	2	7
PRO390	SUPERVISED INTERNSHIP IN PRODUCTION ENGINEERING		180	180	0	1	7
PRO721	MANUFACTURING ENGINEERING		60	72	4	0	7
PRO723	QUALITY ENGINEERING		60	72	3	1	7
PRO807	PLANNING AND PRODUCTION CONTROL		60	72	4	0	7
PRO809	ECONOMIC ENGINEERING		60	72	4	0	7
PRO490	FINAL UNDERGRADUATE PROJECT	1920 hours	60	72	4	0	8
PRO710	SCIENCE, TECHNOLOGY AND SOCIETY		60	72	4	0	8
PRO716	ENGINEERING PROCESS, RISKS AND LOSS PREVENTION		60	72	4	0	8
PRO724	LOGISTICS		60	72	4	0	8
PRO725	ENGINEERING INFORMATION		60	72	3	1	8
PRO808	SOFTWARE ENGINEERING III		60	72	3	1	8
PRO491	UNDERGRADUATE THESIS	PRO490	60	72	4	0	9
PRO714	INDUSTRIAL ECONOMICS		60	72	4	0	9
PRO910	PLANNING AND PRODUCTION MANAGEMENT		60	72	4	0	9
PRO909	STRATEGIC HUMAN RESOURCES		60	72	4	0	10
PRO920	FACTORY DESIGN		60	72	4	0	10

CODE	ELECTIVE DISCIPLINES	PREREQUISITE	SWL	CWL	CLASSES		SEM
					T	P	

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



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

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



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