

Transilvania University of Braşov, Romania

Study program: Engineering and Quality Management

Faculty: Technological Engineering and Industrial Management
 Study period: 4 years (bachelor)
 Academic year structure: 2 semesters (14 weeks per semester)
 Examination sessions (two): winter session (January/February)
 summer session (June/July)

Courses per years (C= course; S = seminar; L = laboratory; P = project)

1st Year

No. crt.	Course	Code	1 st Semester					2 nd Semester					
			C	S	L	P	Cred	C	S	L	P	Cred	
01	Mathematics	AM	2	2			4						
02	Descriptive geometry	GD	2	2			5						
03	Chemistry	CHI	2		1		3						
04	Computer programming and programming languages 1	PCL1	1		2		3						
05	Technical drawing and info- graphics 1	DTI1	2		3		5						
06	Physics	FIZ	2		2		5						
07	Integration and personal development	IDP	1	1			2						
08	Modern languages 1a	LM1a	1	1			3						
	Modern languages 1b	LM1b											
	Modern languages 1c	LM1c											
	Modern languages 1d	LM1d											
09	Physical training 1	EDF1		1			1						
10	Material science and engineering	SIM						3		2			5
11	Linear algebra, analytical and differential geometry	ALGA						2	2				4
12	Mechanics	MEC						2	3				5
13	Technical drawing and info- graphics 2	DTI2						1		4			5
14	Computer programming and programming languages 2	PCL2						2		2			5
15	General economics	ECG						1	1				3
16	Modern languages 2a	LM2a						1	1				3
	Modern languages 2b	LM2b											
	Modern languages 2c	LM2c											
	Modern languages 2d	LM2d											
17	Physical training 2	EDF2							1				1

2nd Year

No. crt.	Course	Code	3 rd Semester					4 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Special mathematics	MS	2	2			4					
02	Strength of materials 1	RM1	2	1	1		5					
03	Mechanisms	MEC	3		2		6					
04	Numerical methods	MNI	2		2		4					
05	Fluid mechanics and hydraulic equipment	MFH	2		1		3					
06	Electrotechnical and applied Electronics	EEA	2		2		5					
07	Modern languages 3a	LM3a	1	1			3					
	Modern languages 3b	LM3b										
	Modern languages 3c	LM3c										
	Modern languages 3d	LM3d										
08	Physical training	EDF3		1			1					
09	Machine elements 1	OM1						2		1	1	4
10	Strength of materials II	RM2						2	1	1		4
11	3D Modelling	M3D						2		2		4
12	Basics of industrial engineering	BI1						2		2		4
13	Material selection and heat treating	AMTT						2		1		3
14	Thermomechanics and heat engines	TET						2		1		3
15	Industrial Management	MAN						2	1			2
16	Internship (90 hours/ year)	PRA2										4
17	Modern languages 3a	LM3a						1	1			2
	Modern languages 3b	LM3b										
	Modern languages 3c	LM4a										
	Modern languages 3d	LM4b										
18	Physical training	EDF4							1			1

3rd Year

No. crt.	Course	Code	5 th Semester					6 th Semester				
			C	S	L	P	Cred	C	S	L	P	Cred
01	Data acquisition and distribution systems	SADD	2		2		4					
02	Fundamentals of cutting surface on machine-tools	BGSA	3		2		5					
03	Probability and applied statistics	PPAC	2	1	1		4					
04	Machine elements II	OM2	2		1		4					
05	Machine elements II - Project	OMP				2	3					
06	Allowances and dimensional control	TCD	2		2		5					
07	Finite element analysis	MEF	2		2		5					
08	Manufacturing technologies	TCMI						2		2		4
09	Machine-tools	MU						2		1		3
10	Cold-pressing technology	TPRI						3		2		5
11	Design of cutting tools	PSA						2		1	1	4
12	Fixture design	PDI						2		1		3
13	Databases in quality assurance	BDAC						2		2		3
14	Internship (90 hours/year)	PRA3										4
15	Basics of computer aided manufacturing design	CADM						2		2		4

4th Year

No. crt.	Course	Code	7 th Semester					8 th Semester					
			C	S	L	P	Cred	C	S	L	P	Cred	
01	Quality of manufacturing processes	CPT	2		1		4						
02	Quality of manufacturing processes - Project	CPTP				2	3						
03	Flexible fixture and assembly devices	DFP	1			2	3						
04	Manufacturing and cold-pressing technologies	TFPR	2			1	4						
05	Quality management	MC	2		1	1	4						
06	Statistical control	COS	2		2	1	5						
07	Reliability analysis of industrial systems	FES	2		2		4						
08	Advanced programming	MAP	2		1		3						
09	Production and operations management	MPO						2		1			2
10	Audit	AUD						2		1	1		3
11	Ecology and environment protection	EPM						2		2			2
12	Projects management	MP						1			2		2
13	Computer aided design for manufacturing	PTAC						1		2			2
14	Management and maintenance engineering	MIN						2		1			2
15	Engineering and industrial risk management	MSSO						2		2			3
16	Work on diploma project	EPD									4		4
17	Internship for diploma project (60 hours)	DPRD											10