

# 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)

### 1<sup>st</sup> Year

No. crt.	Course	Code	1 <sup>st</sup> Semester					2 <sup>nd</sup> 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 I	PCL1	1		2		3						
05	Technical drawing and info- graphics I	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 I	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 II	DTI2						1		4			5
14	Computer programming and programming languages II	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 II	EDF2							1				1

### 2<sup>nd</sup> Year

No. crt.	Course	Code	3 <sup>rd</sup> Semester					4 <sup>th</sup> Semester					
			C	S	L	P	Cred	C	S	L	P	Cred	
01	Special mathematics	MS	2	2			4						
02	Strength of materials I	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 III	EDF3		1			1						
09	Machine elements I	OM1						2		1	1	4	
10	Strength of materials II	RM2						2	1	1	4		
11	Basics of computer-aided design for manufacturing	BPTA						2		2	4		
12	Basics of industrial engineering	BI1						2		2	4		
13	Heat treatments	TT						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 IV	EDF4							1		1		

### 3<sup>rd</sup> Year

No. crt.	Course	Code	5 <sup>th</sup> Semester					6 <sup>th</sup> 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 elements 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	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	Advanced materials and technologies	MTAV						2		2	4		

### 4<sup>th</sup> Year

No. crt.	Course	Code	7 <sup>th</sup> Semester					8 <sup>th</sup> 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	FIS	2		2		4						
08	Computer aided design for manufacturing	PTAC	2		1		3						
09	Production and operations management	MPO						2		1	3		

10	Audit	AUD					2		1	1	4
11	Ecology and environment protection	EPM					2		1		3
12	Projects management	MP					1			2	3
13	Advanced programming	MAP					1		2		3
14	Management and maintenance engineering	MIN					2		1		3
15	Engineering and industrial risk management	MSSO					1		2		3
16	Work on diploma project	EPD								4	4
17	Internship for diploma project (60 hours)	DPRD									4