

8. B.S. in Mechatronics Engineering (“Ingeniero en Mecatrónica”) - IMT - Edition 2019

8.1 Hochschule Bochum

TECNOLÓGICO DE MONTERREY will provide sufficient academic credits for Hochschule Bochum students to pursue studies toward obtaining the Bachelor Degree at TECNOLÓGICO DE MONTERREY and transfer credits to count as part of Year 3 (three) of the Hochschule Bochum Bachelor's degree. A guide towards the courses offered at TECNOLÓGICO DE MONTERREY and accreditation inside Hochschule Bochum is shown below:

Tecnologico de Monterrey			Hochschule Bochum		
B.S. in Mechatronics Engineering			B.Eng. Mechatronics		
Code	Course or Formative Unit	Credits	Code	Course	ECTS
	Possible accreditation				
EG1005	Elective Course Ethics and Citizenship	3		• Schlüsselkompe-tenzen (• Key skills)	5
MR2006B	Industrial Automation	8		• Microcontroller (• Microcontroller) • Echtzeitregelung (• Real-time control)	15
MR2025	Design of Control Systems	2		• Regelungstechnik (• Control engineering)	
MR2024	Mechatronics Design	1		• Mechatronik Design (• Mechatronic design)	5
MR2005B	Troubleshooting Process	4		• Analoge Schaltungstechnik (• Analog circuit technology) • Fluidtechnik (• Fluid technology)	10
	Internship and/or courses	18		• Praxisphase (• Practical phase) + thesis	30
TOTAL		36		TOTAL	60

8.2 Hochschule Esslingen

TECNOLÓGICO DE MONTERREY will provide sufficient academic credits for Hochschule Mannheim students to pursue studies toward obtaining the Bachelor Degree at TECNOLÓGICO DE MONTERREY and transfer credits to count as part of Year 3 (three) of the Hochschule Mannheim Bachelor's degree. A guide towards the courses offered at TECNOLÓGICO DE MONTERREY and accreditation inside Hochschule Mannheim is shown below:

Tecnologico de Monterrey			Hochschule Esslingen		
B.S. in Mechatronics Engineering			B.Eng. Mechatronics		
Code	Course	Credits	Code	Course	ECTS
			Possible accreditation		
MR2024	Mechatronic Design	1	6138	Product development 1	5
MR2006B	Industrial Automation	8	6008	Microprocessor technology	5
			6140	Automation and materials	5
MR2025	Design of Control Systems	2	6121	Simulation and control of systems	5
MR2005B	Troubleshooting Processes	4	6123	Electric drives and sensors	5
EG1005	Elective Course Ethics and Citizenship	3	6013	Soft skills	5
	Internship and/or courses OP3091-6	18	6014	Practical semester + thesis	4
	TOTAL	36		TOTAL	60

8.3 Hochschule Mannheim

TECNOLÓGICO DE MONTERREY will provide sufficient academic credits for Hochschule Mannheim students to pursue studies toward obtaining the Bachelor Degree at TECNOLÓGICO DE MONTERREY and transfer credits to count as part of Year 3 (three) of the Hochschule Mannheim Bachelor's degree. A guide towards the courses offered at TECNOLÓGICO DE MONTERREY and accreditation inside Hochschule Mannheim is shown below:

Tecnologico de Monterrey			Hochschule Mannheim		
B.S. in Mechatronics Engineering			B.S. Mechatronics Engineering		
Code	Code	Code	Code	Course	Credits
				Possible accreditation	
MR2025	Design of Control Systems	2	RG	Control Engineering (Regelungstechnik)	6
MR2006B	Industrial Automation	8	MCP	Microcomputing and Embedded Development (Microcomputing und Embedded Development)	5
MR2005B	Troubleshooting Process	4	MCP	Microcomputing and Embedded Development	5
			TDM	Thermodynamics (Thermodynamik)	5
EG1005	Elective Course Ethics and Citizenship	3		Soft Skills	5
MR2024	Mechatronic Design	1	EMS	Development of Mechatronics Systems	5
	Internship and/or courses OP3091-6	18		Internship semester + thesis	30
	TOTAL	36		TOTAL	60

8.4 Hochschule für Technik und Wirtschaft des Saarlandes

TECNOLÓGICO DE MONTERREY will provide sufficient academic credits for Hochschule für Technik und Wirtschaft des Saarlandes students to pursue studies toward obtaining the Bachelor Degree at TECNOLÓGICO DE MONTERREY and transfer credits to count as part of Year 3 (three) of the Hochschule für Technik und Wirtschaft des Saarlandes Bachelor's degree. A guide towards the courses offered at TECNOLÓGICO DE MONTERREY and accreditation inside Hochschule für Technik und Wirtschaft des Saarlandes is shown below:

Tecnologico de Monterrey			Hochschule für Technik und Wirtschaft des Saarlandes		
B.S. in Mechatronics Engineering			B. Eng. Mechatronics/sensor technology		
Code	Course	Credits	Code	Course	ECTS
				Possible accreditation	
MR2006B	Industrial Automation	8	B11	Micro computer technology 1	5
MR2005B	Troubleshooting Process	4	B31	System technology in mechatronics	5
			B15	Electronic components	5
EG1005	Elective Course Ethics and Citizenship	3	B17	General Studies I	2.5
MR2024	Mechatronic Design	1	B18	General Studies II	2.5
			B19	Mechanics design 3	5
MR2025	Design of Control Systems	2	B28	Control engineering	5
	Internship and/or courses OP3091-6	18	B36	Practical phase + thesis	30
	TOTAL	36		TOTAL	60

8.5 Hochschule Zittau / Görlitz

TECNOLÓGICO DE MONTERREY will provide sufficient academic credits for Hochschule Zittau / Görlitz students to pursue studies toward obtaining the Bachelor Degree at TECNOLÓGICO DE MONTERREY and transfer credits to count as part of Year 3 (three) of the Hochschule Zittau / Görlitz Bachelor's degree. A guide towards the courses offered at TECNOLÓGICO DE MONTERREY and accreditation inside Hochschule Zittau / Görlitz is shown below:

Tecnologico de Monterrey			Hochschule Zittau /Görlitz		
B.S. in Mechatronics Engineering			B. Eng. Automation and Mechatronics		
Code	Course or Formative Unit	Credits	Code	Course	ECTS
				Possible accreditation	
MR2006B	Industrial Automation	8	AMB02050	Machine automation / mechatronics - expanded	6
MR2005B	Troubleshooting Processes	4	MBK02040	Machine automation and mechatronics	4
			AMB02850	Elective module 1	4
MR2024	Mechatronic Design	1	AMB02860	Elective module 2	6
MR2025	Design of Control Systems	2	AMB02860	Elective module 2	6
EG1005	Elective Course Ethics and Citizenship	3	WIW03000	Law for engineers	4
	Internship and/or courses OP3091-6	18		Practical phase + thesis	30
	TOTAL	36		TOTAL	60