

**Faculty:**  
Engineering



**Site:**  
Campus Karthause

<b>Degree Title:</b> Mechatronics						
<b>Academic Title:</b> Bachelor of Engineering (B.Eng.)			<b>Prerequisites for Admission:</b> <ul style="list-style-type: none"> <li>The general examinations required for entrance into universities or institutes of higher education (<i>Allgemeine Hochschulreife</i> or <i>Fachhochschulreife</i>), or a recognised equivalent preparatory qualification</li> <li>Industrial placement (min. 13 weeks)</li> </ul>			
<b>Aim of the Course:</b> The aim of the Bachelor Degree is to offer students a practical, professional qualification for future-oriented specialists and managers. The central theme of the course has been geared towards the recommendations given by the Association of German Electrical Engineers ( <i>VDE</i> ) and Association of German Engineers ( <i>VDI</i> ) and those of the association of electrical engineering and information technology faculties at universities of applied science.						
<b>Structure of the Course/Curriculum:</b>						
<b>„Bachelor of Engineering“ Mechatronik</b>						
<b>1. Semester</b>	<b>2. Semester</b>	<b>3. Semester</b>	<b>4. Semester</b>	<b>5. Semester</b>	<b>6. Semester</b>	<b>7. Semester</b>
Mathematik I (10c)	Mathematik II (5c)	Mathematik III (5c)	Werkstoffe der Mechatronik (6c)	Konstruktionslehre (3c)	CAD-FEM (4c)	Praxisphase (15c)
Grundlagen der Elektrotechnik I (5c)	Grundlagen der Elektrotechnik II (5c)	Grundlagen der Elektrotechnik III (5c)	Maschinenelemente (4c)	Technische Mechanik (4c)	Automatisierungstechnik (5c)	
Technische Physik I (5c)	Technische Physik II (5c)	Technische Physik III (5c)	Regelungstechnik (5c)	Maschinenelemente (6c)	Antriebssysteme (5c)	
Ingenieur-Informatik I (5c)	Ingenieur-Informatik II (5c)	Messtechnik (5c)	Rechnernetze/ Kommunikationssysteme I (5c)	Regelungstechnik (5c)	Mechatronik Design (Praktikum) (4c)	Bachelor-Thesis (12c)
Digitaltechnik (2c)	Technische Mechanik II (5c)	Ingenieur-Informatik III (5c)	Technisches Wahlpflichtmodul I (5c)	Sensorik/Aktorik (4c)	Nichttechnisches Wahlpflichtmodul I (3c)	
Technische Mechanik I (5c)	Fremdsprachen (3c)	Elektronik I (5c)	Technisches Wahlpflichtmodul II (3c)	Mechatronik Design (2c)	Studienarbeit (5c)	Kolloquium (3c)
		Studium Generale (2c)		Digitale Signalverarbeitung (5c)		
<b>‘Bachelor of Engineering’ in Mechatronics</b>						
<b>Semester 1</b> Mathematics I (10c) Principles of Electrical Engineering I (5c) Technical Physics I (5c) Engineering Informatics I (5c) Digital Technology (2c) Technical Mechanics I (5c)						
<b>Semester 2</b> Mathematics II (5c) Principles of Electrical Engineering II (5c) Technical Physics II (5c) Engineering Informatics II (5c) Technical Mechanics II (5c) Foreign Languages (3c)						
<b>Semester 3</b> Mathematics III (5c) Principles of Electrical Engineering III (5c) Technical Physics III (5c) Measurement Engineering (5c) Engineering Informatics III (5c) Electronics I (5c) General Studies (2c)						
<b>Semester 4</b> Mechatronic Materials (6c) Machine Parts (4c) Control Engineering (5c) Computer Networks/Communication Systems I (5c) Technical Elective Module I (5c) Technical Elective Module II (3c)						
<b>Semester 5</b> Theory of Design (3c) Technical Mechanics (4c) Machine Parts (6c) Control Engineering (5c) Sensor Engineering/Actuation (4c) Mechatronic Design (2c) Digital Signal Processing (5c)						
<b>Semester 6</b> CAD-FEM (4c) Automation Systems (5c) Actuation Systems (5c) Mechatronic Design (Placement) (4c) Non-Technical, Elective Module I (3c) Assignment (5c)						
<b>Semester 7</b> Practical Phase (15c) Bachelor Thesis (12c) Final Oral Examination (3c)						

<b>Employability/Professional Activities:</b> The Bachelor Degree in Mechatronics is designed to prepare students especially for occupational areas which require the combination of the specialist areas of electrical engineering/electronics, mechanical engineering/mechanics and information technology.	
<b>Final Examination/Examination Regulations:</b> <ul style="list-style-type: none"><li>• Legal basis: regulations governing the examination on the B.Eng. Electrical Engineering, Information Technology and Mechatronics degrees</li><li>• Module examinations, thesis &amp; final oral examination</li></ul>	<b>Additional Information</b> <ul style="list-style-type: none"><li>• Modular,</li><li>• Accredited degree course</li></ul>
<b>Admission to Postgraduate Studies</b> Successful completion of the BA Degree qualifies a student for acceptance onto a Master Degree Course.	
<b>The Faculty's ECTS-/International Student Advisor</b> Prof. Dr. Andreas Kurz, e-mail: <a href="mailto:kurz@fh-koblenz.de">kurz@fh-koblenz.de</a>	