

## Mechatronics Applied Engineering Programme

	No.	Module Code	Module Name	Prerequisite Course	Units	
					C.P	L.H
	1		Acknowledged achievement from previous studies			30

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First training semester	No.	Module Code	Module Name	Prerequisite Course	Units	
					C.P	L.H
	1		Electric Circuits and Components		10	300
	2		Applied Mathematics I		4	120
	3		Applied Physic I		4	120
	4		English Language I		7	210
	5		Islamic Studies I		2	60
	6		Academic Competencies I		2	60
	7		Electric Circuits and Components		10	300
Total					29	870

Second training semester	No.	Module Code	Module Name	Prerequisite Course	Units	
					C.P	L.H
	1		Applied Mechanical Systems		8	240
	2		Computer Programming & MATLAB		3	90
	3		Applied Mathematics II		4	120
	4		Applied Physic II		4	120
	5		English Language II		7	210
6		Academic Competencies I		2	60	
Total					28	840

Third training semester	No.	Module Code	Module Name	Prerequisite Course	Units	
					C.P	L.H
	1		Analog Electronics and Applications		9	270
	2		Digital Electronics and Applications		6	180
	3		Measurement Systems and Sensor		6	180
	4		Applied Mathematics III		4	120
5		English Language III		5	150	
Total					30	900

Fourth training semester	No.	Module Code	Module Name	Prerequisite Course	Units	
					C.P	L.H
	1		Power Electronics and Electric Drives		6	180
	2		Industrial Automation and PLC		4	120
	3		Programming in C		3	90
	4		Automatic Control Systems		4	120
	5		English Language IV		5	150
	6		Business Studies Module		2	60
7		Train the Trainer Module		2	60	
Total					26	780

Fifth training semester	No.	Module Code	Module Name	Prerequisite Course	Units	
					C.P	L.H
	1		Microcontroller Based Applications		5	150
	2		Industrial Bus Systems		4	120
	3		Engineering Systems Design and Management		3	90
	4		Automotive Technology		3	90
	5		English Language 5		3	90
	6		Business Studies Module		2	60
	7		Train the Trainer Module		2	60
	Total				22	660

Sixth training semester	No.	Module Code	Module Name	Prerequisite Course	Units	
					C.P	L.H
	1		Mechatronics System Applications		4	120
	2		Product Design and Development		2	60
	3		Robotic and Intelligent Systems		3	90
	4		Bachelor Thesis		15	450
	5		Islamic Studies II		2	60
	6		English Language 6 Train the Trainer Module		3	90
	7		Train the Trainer Module		2	60
	8		Business Studies Module		2	60
	Total				33	990

Total	No.	Module Code	Module Name	Prerequisite Course	Units	
					C.P	L.H
	Sum Total				168	5040

C.P	ECTS-Points
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**Notes :**

1 ECTS credit point = 30 hours of learning

**Typically the student will have no more than 25 class room contact hours per week plus self study and research hours.**

The Technical Trainers College (TTC) has 18 weeks of training per semester.

The "168 ECTS-Points" in (TTC), with Company Field Practice, 12 ECTS Points, plus the "60 ECTS-Points" from previous studies equals "240 ECTS-Points".

The 240 ECTS points are needed to successfully achieve the Applied Engineering Bachelor degree at the Technical Trainers College (TTC).

Allocation of hours

240 Credit Points for Full certification

Credit point breakdown

Prior Learning from CoT/CoE	60
Vocational Discipline	103
Company Field Practice	12
Bachelor Project/colloquium	15
English Language	30
Islamic Studies	4
Academic Studies	4
Business Enterprise	6
Train the Trainer	6
<b>Total</b>	<b>240</b>