

Bachelor of Electrical Engineering Technology with Honours (BELT)

	CODE	SUBJECT	CATEGORY	CREDIT	PRE-REQUISITE
SEMESTER 1	BELG 1013	Matematik Teknikal <i>Technical Mathematics</i>	P	3	
	BERE 1013	Fizik Teknikal <i>Technical Physics</i>	P	3	
	BELT 1303	Pengukuran dan Sistem Instrumentasi <i>Measurement and Instrumentation System</i>	K	3	
	BELR 1313	Rekabentuk Terbantu Komputer <i>Computer Aided Design</i>	K	3	
	BELK 1303	Pengenalan Litar Elektrik <i>Electrical Circuit Fundamental</i>	K	3	
	BLLW 1142	Bahasa Inggeris untuk Akademik <i>English for Academic Purpose</i>	W	2	
	BKKX XXX1	Kokurikulum I <i>Cocurriculum I</i>	W	1	
TOTAL CREDITS THIS SEMESTER				18	
SEMESTER 2	BMIG 1023	Kalkulus untuk Teknologi <i>Calculus for Technology</i>	P	3	
	BELT 1313	Bengkel Elektronik <i>Electronics Workshop</i>	K	3	
	BELK 1323	Elektrik & Kemagnetan <i>Electrics & Magnetism</i>	K	3	
	BELR 1304	Elektronik & Sistem Digital <i>Digital Electronics & System</i>	K	4	
	**BELK 1333	Litar Elektrik Lanjutan <i>Advanced Electrical Circuit</i>	K	3	BELK 1303
	BKKX XXX1	Kokurikulum II <i>Cocurriculum II</i>	W	1	
	BLHW 1762	Falsafah dan Isu Semasa <i>Philosophy and Current Issue</i>	W	2	
TOTAL CREDITS THIS SEMESTER					
LOCAL STUDENTS				19	

	CODE	SUBJECT	CATEGORY	CREDIT	PRE-REQUISITE
SEMESTER 3	BMKG 2033	Kalkulus Gunaan <i>Applied Calculus</i>	P	3	
	BELT 2333	Pemasangan Elektrik I <i>Electrical Installation I</i>	K	3	
	BELK 1453	Prinsip Elektronik <i>Electronic Principle</i>	K	3	
	BELR 1353	Pengaturcaraan Komputer <i>Computer Programming</i>	K	3	
	BELK 2393	Isyarat Sistem Gunaan <i>Applied Signal Systems</i>	K	3	
	BLLW 1XX2 BLLW 1172	Bahasa ketiga (Untuk Pelajar Tempatan) <i>Third Language (For Local Students)</i> Atau/Or Bahasa Melayu Komunikasi I (untuk pelajar antarabangsa) <i>Malay Language for Communication I</i> (for international students)	W	2	
TOTAL CREDITS THIS SEMESTER				17	
SEMESTER 4	BERG 2043	Kaedah Statistik <i>Statistical Methods</i>	P	3	
	BELR 2373	Sistem Terbenam <i>Embedded Systems</i>	K	3	
	BELT 2373	Pemasangan Elektrik II <i>Electrical Installation II</i>	K	3	
	BELR 2383	Pengenalan Sistem Kawalan <i>Control System Fundamental</i>	K	3	
	BELK 2364	Teknologi Elektrik <i>Electrical Technology</i>	K	4	
	BLLW 2152	Penulisan Akademik <i>Academic Writing</i>	W	2	
	BLHW 2792	Integriti dan Anti Rasuah <i>Integrity and Anti-Corruption</i>	W	2	
TOTAL CREDITS THIS SEMESTER				20	

	CODE	SUBJECT	CATEGORY	CREDIT	PRE-REQUISITE
SEMESTER 5	BELK 2373	Mesin Elektrik <i>Electrical Machines</i>	K	3	
	BELT 3383	Peranti Elektronik Kuasa <i>Power Electronics Devices</i>	K	3	
	BELK 2383	Teknologi Sistem Kuasa <i>Power System Technology</i>	K	3	
	BELT 3403	Automasi Industri <i>Industrial Automation</i>	K	3	
	BLHW 2772	Penghayatan Etika dan Peradaban (untuk pelajar tempatan) <i>Appreciation of Ethics and Civilisations</i> (for local students)	W	2	
	BLHW 2752	Kebudayaan Malaysia (untuk pelajar antarabangsa) <i>Malaysian Culture</i> (for international students)			
	*BELT XXX3	Elektif I <i>Elective I</i>	E	3	
*BELT XXX3	Elektif II <i>Elective II</i>	E	3		
TOTAL CREDITS THIS SEMESTER				20	
SEMESTER 6	BELK 3071	Seminar Kejuruteraan <i>Engineering Seminar</i>	P	1	
	BELU 3764	Projek Sarjana Muda I <i>Bachelor Degree Project I</i>	K	4	
	BELT 4393	Sistem Elektronik Kuasa <i>Power Electronics Systems</i>	K	3	
	BELU 3803	Rekabentuk Projek Berintegrasi <i>Integrated Design Project</i>	K	3	
	BLLW 3162	Bahasa Inggeris untuk Interaksi Profesional <i>English for Professional Interaction</i>	W	2	
	*BELT XXX3	Elektif III <i>Elective III</i>	E	3	
TOTAL CREDITS THIS SEMESTER				16	

	CODE	SUBJECT	CATEGORY	CREDIT	PRE-REQUISITE
SEMESTER 7	BELU 4053	Etika Kejuruteraan & KKPP <i>Engineering Ethics & OSHE</i>	P	3	
	**BELU 4774	Projek Sarjana Muda II <i>Bachelor Degree Project II</i>	K	4	BEEU 3764
	BELT 4413	Kecekapan Tenaga <i>Energy Efficiency</i>	K	3	
	BELK 3403	Sistem Pengagihan Kuasa <i>Power Distribution System</i>	K	3	
	BTMW 4012	Keusahawanan Teknologi <i>Technology Entrepreneurship</i>	W	2	
	*BEE X XXX3	Elektif IV <i>Elective IV</i>	E	3	
TOTAL CREDITS THIS SEMESTER				18	
SEMESTER 8	BELU 48812	Latihan Industri <i>Industrial Training</i>	K	12	
	TOTAL CREDITS THIS SEMESTER				12
TOTAL CREDITS				140	

** Pre-requisite subject

* For Elective I, Elective II, Elective III and Elective IV students may choose strictly from either of the TWO (2) tracks below including Integrated Bachelor–Master Elective Courses.

Track 1: Renewable Energy

CODE	SUBJECT NAME
BELT 3803	Sistem Tenaga Diperbaharui <i>Renewable Energy System</i>
BELT 3823	Teknologi Penyimpanan Tenaga <i>Energy Storage Technology</i>
BELT 3843	Rekabentuk Sistem PV <i>PV System Design</i>
BELT 3853	Aplikasi Elektronik Kuasa <i>Power Electronics Application</i>
BELK 4843	Keserasian Elektromagnetik Sistem Kuasa <i>Power System Electromagnetic Compatibility</i>
BELK 4853	Ekonomi Sistem dan Pasaran Elektrik <i>Electricity Market and System Economics</i>
BELK 4863	Kualiti Kuasa <i>Power Quality</i>
BELR 4863	Kepintaran Buatan <i>Artificial Intelligence</i>

Track 2: Electrical Transportation

CODE	SUBJECT NAME
BELT 3813	Pengenalan kepada Sistem Pengangkutan Elektrik <i>Introduction To Electric Transportation System</i>

BELT 3823	Teknologi Penyimpanan Tenaga <i>Energy Storage Technology</i>
BELT 3853	Aplikasi Elektronik Kuasa <i>Power Electronics Application</i>
BELT 3863	Pemacu Motor dan Sistem Tarikan <i>Motor Drive and Traction System</i>
BELK 4843	Keserasian Elektromagnetik Sistem Kuasa <i>Power System Electromagnetic Compatibility</i>
BELR 4863	Kepintaran Buatan <i>Artificial Intelligence</i>
BELT 4903	Sistem Pemacu Moden <i>Modern Drive System</i>
BELT 4913	Kenderaan Elektrik Hibrid <i>Hybrid Electric Vehicle</i>

Integrated Bachelor–Master Elective Courses

BELP 5153	Insulation Coordination & Diagnostic Testing
BELP 5233	Sustainable Energy and Distributed Generation
BELE 5163	Energy Conversion
BELE 5143	Advanced Electrical Machines and Drives
BELC 5133	Modern Control Design

- # Besides the aforementioned curriculum, the Programme offers professional certificate courses as an added value for the students to increase their employability. Students may choose any ONE (1) subject from the following list.

CODE	CERTIFICATE NAME
BERC 2220	IoT Fundamentals: Big Data & Analytics Professional Certification
BERC 2210	IoT Fundamentals: Connecting Things Professional Certification
BITS 2610	Cisco Certified Network Associate Routing & Switching (Preparation)
BEEE 3100	Programmable Logic Controller (PLC) Level 1 and Level 2
BEEZ 3100	SMCT MT1 – Practical Mechatronics 1
BELT 3100	Energy Efficiency for Lighting
BEKG 4710	Basic Hydraulic Technology

Number of credit hours regarding to course category is represented in the table below.

W = university compulsory subjects

P = program core subjects

K = course core subjects

E = elective subjects

Programme P	P	19
Course K	K	79
University Compulsory	W	16
	W(KK)	2
Industrial Training	K	12
Elective	E	12
		140