

Bachelor of Electrical Engineering Technology (Industrial Power) with Honours (BELK)

	CODE	SUBJECT	CATEGORY	CREDIT	PRE-REQUISITE
SEMESTER 1	BELG 1013	Matematik Teknikal <i>Technical Mathematics</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 1453	Prinsip Elektronik <i>Electronics Principle</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	
	BELK 1323	Elektrik & Kemagnetan <i>Electrics & Magnetism</i>	K	3	
	**BELK 1333	Litar Elektrik Lanjutan <i>Advanced Electrical Circuit</i>	K	3	BELK 1303
	BELR 1304	Elektronik & Sistem Digital <i>Digital Electronics & System</i>	K	4	
	BELR 1353	Pengaturcaraan Komputer <i>Computer Programming</i>	K	3	
	BELK 1311	Bengkel Elektrik I <i>Electrical Workshop I</i>	K	1	
	BLHW 1762	Falsafah dan Isu Semasa <i>Philosophy and Current Issue</i>	W	2	
	BKKX XXX1	Kokurikulum II <i>Cocurriculum II</i>	W	1	
TOTAL CREDITS THIS SEMESTER				20	

	CODE	SUBJECT	CATEGORY	CREDIT	PRE-REQUISITE
SEMESTER 3	BMKG 2033	Kalkulus Gunaan <i>Applied Calculus</i>	P	3	
	BELK 2373	Mesin Elektrik <i>Electrical Machines</i>	K	3	
	BELK 2364	Teknologi Elektrik <i>Electrical Technology</i>	K	4	
	**BELK 2342	Bengkel Elektrik II <i>Electrical Workshop II</i>	K	2	BELK 1311
	BELR 2383	Pengenalan System Kawalan <i>Control System Fundamental</i>	K	3	
	BELK 2393	Sistem Isyarat Gunaan <i>Applied Signal System</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				20	
SEMESTER 4	BERG 2043	Kaedah Statistik <i>Statistical Methods</i>	P	3	
	BELK 2463	Thermodinamik & Pemandahan Haba <i>Thermodynamic & Heat Transfer</i>	K	3	
	BELR 2373	Sistem Terbenam <i>Embedded System</i>	K	3	
	BELK 2383	Teknologi Sistem Kuasa <i>Power System Technology</i>	K	3	
	BELK 3413	Elektronik Kuasa <i>Power Electronics</i>	K	3	
	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				19	

	CODE	SUBJECT	CATEGORY	CREDIT	PRE-REQUISITE
SEMESTER 5	BELK 3423	Penggerak & Pemacu <i>Actuators & Drives</i>	K	3	
	**BELK 3393	Sistem Kuasa Lanjutan <i>Advanced Power System</i>	K	3	BELK 2383
	BELK 3473	Sistem Kuasa Penjanaan dan Penghantaran <i>Power System Generation & Transmission</i>	K	3	
	BELR 3413	PLC & Aplikasi <i>PLC & Applications</i>	K	3	
	BELK 3403	Rekabentuk Sistem Pengagihan Kuasa <i>Power Distribution System Design</i>	K	3	
	BLHW 2772 BLHW 2752	Penghayatan Etika dan Peradaban (untuk pelajar tempatan) <i>Appreciation of Ethics and Civilisations</i> (for local students) Kebudayaan Malaysia (untuk pelajar antarabangsa) <i>Malaysian Culture</i> (for international students)	W	2	
TOTAL CREDITS THIS SEMESTER				17	
SEMESTER 6	BELU 4053	Etika Kejuruteraan & KKPP <i>Engineering Ethics & OSHE</i>	P	3	
	BELK 3071	Seminar Kejuruteraan <i>Engineering Seminar</i>	P	1	
	BELU 3764	Projek Sarjana Muda I <i>Bachelor Degree Project I</i>	K	4	
	BELK 4823	Teknologi Voltan Tinggi <i>High Voltage Technology</i>	K	3	
	BELK 4833	Perlindungan Sistem Kuasa <i>Power Systems Protection</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	
TOTAL CREDITS THIS SEMESTER				19	

	CODE	SUBJECT	CATEGORY	CREDIT	PRE-REQUISITE
SEMESTER 7	**BELU 4774	Projek Sarjana Muda II <i>Bachelor Degree Project II</i>	K	4	BELU 3764
	BTMW 4012	Keusahawanan Teknologi <i>Technology Entrepreneurship</i>	W	2	
	*BELX XXX3	Elektif I <i>Elective I</i>	E	3	
	*BELX XXX3	Elektif II <i>Elective II</i>	E	3	
	*BELX XXX3	Elektif III <i>Elective III</i>	E	3	
TOTAL CREDITS THIS SEMESTER				15	
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, and Elective III students may choose any **THREE (3)** subjects from the list below including Integrated Bachelor–Master Elective Courses.

CODE	SUBJECT NAME
BELK 4803	Operasi & Automasi Sistem Kuasa <i>Power System Operation & Automation</i>
BELR 4873	Teknologi Penyelenggaraan & Pengurusan Aset <i>Maintenance Technology & Asset Management</i>
BELT 3803	Sistem Tenaga Diperbaharui <i>Renewable Energy System</i>
BELK 4843	Keserasian Elektromagnet Sistem Kuasa <i>Power Systems Electromagnetic Compatibility</i>
BELT 4413	Kecekapan Tenaga <i>Energy Efficiency</i>
BELK 4853	Ekonomi Sistem dan Pasaran Elektrik <i>Electricity Market and System Economics</i>
BELK 4863	Kualiti Kuasa <i>Power Quality</i>
BELR 4813	Kawalan Proses Industri <i>Industrial Process Control</i>
BELR 4863	Kepintaran Buatan <i>Artificial Intelligence</i>

Integrated Bachelor–Master Elective Courses

For student who wish to further their study, the program offers Integrated Bachelor–Master Elective Courses: Choose any **THREE (3)** subjects from the list below to fulfill Elective I, Elective II, and Elective III.:

CODE	SUBJECT NAME
BELP 5153	Penyelarasan Penebat & Ujian Diagnostik <i>Insulation Coordination & Diagnostic Testing</i>
BELP 5233	Tenaga Mampan dan Penjanaaan Teragih <i>Sustainable Energy and Distributed Generation</i>
BELE 5163	Penukaran Tenaga <i>Energy Conversion</i>
BELE 5143	Mesin dan Pemacu Elektrik Lanjutan <i>Advanced Electrical Machines and Drives</i>
BELG 5133	Rekabentuk Kawalan Moden <i>Modern Control Design</i>

- # 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	16
Course K	K	85
University Compulsory	W	18
Industrial Training	K	12
Elective	E	9
		140