Bachelor of Electrical Engineering Technology (Industrial Power) with Honours (BELK) for Handbook 2026/2027

	CODE	SUBJECT	CATEGORY	CREDIT	PRE-REQUISITE
SEMESTER 1	BELG 1013	Matematik Teknikal *Technical Mathematics*	P	3	
	BELT 1303	Pengukuran dan Sistem Instrumentasi *Measurement and Instrumentation System*	K	3	
	BELR 1313	Rekabentuk Terbantu Komputer *Computer Aided Design*	K	3	
	BELK 1453	Prinsip Elektronik *Electronics Principle*	K	3	
	BELK 1303	Pengenalan Litar Elektrik *Electrical Circuit Fundamental*	K	3	
	BLLW 1142	Bahasa Inggeris untuk Akademik *English for Academic Purpose*	W	2	
	BKKX XXX1	Kokurikulum I *Cocurriculum I*	W	1	
TOTAL CREDITS THIS SEMESTER				**18**	
SEMESTER 2	BMIG 1023	Kalkulus untuk Teknologi *Calculus for Technology*	P	3	
	BELK 1323	Elektrik & Kemagnetan *Electrics & Magnetism*	K	3	
	**BELK 1333	Litar Elektrik Lanjutan *Advanced Electrical Circuit*	K	3	BELK 1303
	BELR 1304	Elektronik & Sistem Digital *Digital Electronics & System*	K	4	
	BELR 1353	Pengaturcaraan Komputer *Computer Programming*	K	3	
	BELK 1311	Bengkel Elektrik I *Electrical Workshop I*	K	1	
	BLHW 1772	Falsafah dan Cabaran Semasa *Philosophy and Current Challenges*	W	2	
	BKKX XXX1	Kokurikulum II *Cocurriculum II*	W	1	
TOTAL CREDITS THIS SEMESTER				**20**	

	CODE	SUBJECT	CATEGORY	CREDIT	PRE-REQUISITE
SEMESTER 3	BMKG 2033	Kalkulus Gunaan *Applied Calculus*	P	3	
	BELK 2373	Mesin Elektrik *Electrical Machines*	K	3	
	BELK 2364	Teknologi Elektrik *Electrical Technology*	K	4	
	**BELK 2342	Bengkel Elektrik II *Electrical Workshop II*	K	2	BELK 1311
	BELR 2383	Pengenalan System Kawalan *Control System Fundamental*	K	3	
	BELK 2393	Sistem Isyarat Gunaan *Applied Signal System*	K	3	
	BLLW 1XX2 BLLW 1172	Bahasa ketiga **(Untuk Pelajar Tempatan)** *Third Languade **(For Local Students)*** Atau/*Or* Bahasa Melayu Komunikasi I **(untuk pelajar antarabangsa)** *Malay Language for Communication I* ***(for international students)***	W	2	
TOTAL CREDITS THIS SEMESTER				**20**	
SEMESTER 4	BERG 2043	Kaedah Statistik *Statistical Methods*	P	3	
	BELK 2463	Thermodinamik & Pemindahan Haba *Thermodynamic & Heat Transfer*	K	3	
	BELR 2373	Sistem Terbenam *Embedded System*	K	3	
	BELK 2383	Teknologi Sistem Kuasa *Power System Technology*	K	3	
	BELK 3413	Elektronik Kuasa *Power Electronics*	K	3	
	BLLW 2152	Penulisan Akademik *Academic Writing*	W	2	
	BLHW 2792	Kursus Integriti dan Anti Rasuah *Integrity and Anti-Corruption Course*	W	2	
TOTAL CREDITS THIS SEMESTER				**19**	

	CODE	SUBJECT	CATEGORY	CREDIT	PRE-REQUISITE
SEMESTER 5	BELK 3423	Penggerak & Pemacu *Actuators & Drives*	K	3	
	**BELK 3393	Sistem Kuasa Lanjutan *Advanced Power System*	K	3	BELK 2383
	BELK 3473	Sistem Kuasa Penjanaan dan Penghantaran *Power System Generation & Transmission*	K	3	
	BELR 3413	PLC & Applikasi *PLC & Applications*	K	3	
	BELK 3403	Rekabentuk Sistem Pengagihan Kuasa *Power Distribution System Design*	K	3	
	BLHW 2782 BLHW 2762	Aspirasi Negara Bangsa **(untuk pelajar tempatan)** *Malaysian Nation State Aspiration* ***(for local students)*** Citra Malaysia **(untuk pelajar antarabangsa)** *Malaysian Citra* ***(for international students)***	W	2	
TOTAL CREDITS THIS SEMESTER				**17**	
SEMESTER 6	BELU 4053	Etika Kejuruteraan & KKPP *Engineering Ethics & OSHE*	P	3	
	BELK 3071	Seminar Kejuruteraan *Engineering Seminar*	P	1	
	BELU 3764	Projek Sarjana Muda I *Bachelor Degree Project I*	K	4	
	BELK 4823	Teknologi Voltan Tinggi *High Voltage Technology*	K	3	
	BELK 4833	Perlindungan Sistem Kuasa *Power Systems Protection*	K	3	
	BELU 3803	Rekabentuk Projek Berintegrasi *Integrated Design Project*	K	3	
	BLLW 3162	Bahasa Inggeris untuk Interaksi Profesional *English for Professional Interaction*	W	2	
TOTAL CREDITS THIS SEMESTER				**19**	

	CODE	SUBJECT	CATEGORY	CREDIT	PRE-REQUISITE
SEMESTER 7	**BELU 4774	Projek Sarjana Muda II *Bachelor Degree Project II*	K	4	BELU 3764
	BTMW 4012	Keusahawanan Teknologi *Technology Enterpreneurship*	W	2	
	*BELX XXX3	Elektif I *Elective I*	E	3	
	*BELX XXX3	Elektif II *Elective II*	E	3	
	*BELX XXX3	Elektif III *Elective III*	E	3	
TOTAL CREDITS THIS SEMESTER				**15**	
SEMESTER 8	BELU 48812	Latihan Industri *Industrial Training*	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:

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

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 *Insulation Coordination & Diagnostic Testing*
BELP 5233	Tenaga Mampan dan Penjanaan Teragih *Sustainable Energy and Distributed Generation*
BELE 5163	Penukaran Tenaga *Energy Conversion*
BELE 5143	Mesin dan Pemacu Elektrik Lanjutan *Advanced Electrical Machines and Drives*
BELG 5133	Rekabentuk Kawalan Moden *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
BEEE 3210	Programmable Logic Controller (PLC) Level 1 and Level 2
BELT 3100	Energy Efficiency for Lighting System
BEKG 4710	Basic Hydraulic Technology
BELS 3100	Practical Electro-Pneumatic

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