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# OUR SHORT COURSE PROGRAMS



**UniKL**  
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**ACE**  
ADVANCEMENT AND  
CONTINUING EDUCATION



+604-722 1400



[aceuniklmsi@unikl.edu.my](mailto:aceuniklmsi@unikl.edu.my)

Universiti Kuala Lumpur Malaysian Spanish Institute,

Lot 12-16, Lebuhraya Perdana, Kulim Hi-Tech Park 09090 Kulim Kedah Darul Aman

# COURSE LIST

## ELECTRICAL ELECTRONICS & AUTOMATION MODULES

No	Course Title	Course Code	Duration	Training Fee
1	Industrial Automation	EEA 102	10	4,200.00
2	Pneumatic Systems	EEA 104 (i)	3	1,776.00
3	Design & Construction of Electro Pneumatic	EEA 104 (ii)	3	1,776.00
4	Advanced Pneumatic Control	EEA 104 (iii)	3	1,776.00
5	Hydraulic System	EEA 105 (i)	3	1,776.00
6	Electro Hydraulic System	EEA 105 (ii)	3	1,776.00
7	Advanced Hydraulic System	EEA 105 (iii)	3	1,776.00
8	Human Machine Interface	EEA 106	3	1,776.00
9	Basic Electrical Skill	EEA 107 (i)	3	1,776.00
10	Advanced Electrical Skill	EEA 107 (ii)	3	1,776.00
11	Electrical Device & Control	EEA 108	3	1,776.00
12	Microprocessor for Industrial Application	EEA 109	3	1,776.00
13	PIC Microcontroller in C Language	EEA 111	3	1,776.00
14	Process Control System	EEA 112	2	1,440.00
15	Power Electronics & Drives	EEA 113 (i)	3	1,776.00
16	Advanced Power Electronics & Drive	EEA 113 (ii)	3	1,776.00
17	Basic Electric Motor Control	EEA 114	2	1,440.00
18	Measurement, Instrumentation & Sensors	EEA 116	3	1,776.00
19	Mechatronics (Level 1)	EEA 117 (L1)	3	1,776.00
20	Mechatronics (Level 2)	EEA 117 (L2)	3	1,776.00

# COURSE LIST

## ELECTRICAL ELECTRONICS & AUTOMATION MODULES

No	Course Title	Course Code	Duration	Training Fee
21	Industrial Robotics	EEA 118	3	1,776.00
22	Electronic Packaging (Theory)	EEA 123	3	1,776.00
23	Sensor Technology Application	EEA 124	3	1,776.00
24	Advanced Manufacturing Technology	EEA 126	3	1,776.00
25	Motion Control Technology	EEA 127	3	1,776.00
26	Motor Controller for Machine Maintenance	EEA 128	3	1,776.00
27	Automotive Technology	EEA 129	3	1,776.00
28	Robotic & Control System (with Microcontroller)	EEA 131	3	1,776.00
29	Control and Sensor Application of Differential Drive on Wheel Mobile Robot	EEA 135	3	1,776.00
30	PIC Embedded Mobile Robot Hands on Workshop	EEA 136	3	1,776.00
31	Diagnostics on AC Electric Motors	EEA 139	3	1,776.00
32	Discovery & Diagnostics on Electrical and Electronics	EEA 140	3	1,776.00
33	Hybrid & Electric Vehicle Technology	EEA 141	3	1,776.00
34	Programming Arduino for Control System application	EEA 142	3	1,776.00

# COURSE LIST

## ELECTRICAL ELECTRONICS & AUTOMATION MODULES

No	Course Title	Course Code	Duration	Training Fee
35	Programming Arduino using Matlab/Simulink for control system	EEA 143	3	1,776.00
36	Arduino Mega 2560 for Motor Control Application	EEA 144	3	1,776.00
37	Arduino Mega 2560 for Pneumatics & Hydraulics Application	EEA 145	3	1,776.00
38	Digital Electronics for Motor Control Application	EEA 146	3	1,776.00
39	Digital Electronics for Pneumatics & Hydraulics Application	EEA 147	3	1,776.00
40	DIY Data Acquisition (DAQ) using PIC Microcontroller and Communicate to MATLAB or Labview	EEA 148	3	1,776.00
41	Build Your own DC to DC converter using Microcontroller and Communication with MATLAB or Labview	EEA 149	3	1,776.00
42	DIY Digital PID using PIC Microcontroller and Communication via MATLAB / Simulink or Labview	EEA 150	3	1,776.00
43	DSP with MATLAB/Simulink for Control System Application	EEA 151	3	1,776.00
44	Fuzzy Logic using MATLAB/ Simulink for Control System Application	EEA 152	3	1,776.00

# COURSE LIST

## ELECTRICAL ELECTRONICS & AUTOMATION MODULES

No	Course Title	Course Code	Duration	Training Fee
45	Fuzzy Logic using PIC Microcontroller for Control System Application	EEA 153	3	1,776.00
46	Hardware in Loop Theory, Practical and Application for Control System	EEA 154	3	1,776.00
47	Processor in Loop Theory, Practical and Application for Control System	EEA 155	3	1,776.00
48	Discovery on Variable Speed Drives	EEA 156	3	1,776.00
49	Labview for Control System Application	EEA 158	3	1,776.00
50	Labview for Motor Control Application	EEA 159	3	1,776.00
51	Labview for Pneumatics & Hydraulics Application	EEA 160	3	1,776.00
52	MATLAB/Simulink for Control System Application	EEA 161	3	1,776.00
53	MATLAB/Simulink for Hardware in Loop Application	EEA 162	3	1,776.00
54	MATLAB/Simulink for Processor in Loop	EEA 163	3	1,776.00
55	Microcontroller for Data Communication	EEA 164	3	1,776.00
56	Microcontroller for Pneumatics and Hydraulics Application	EEA 165	3	1,776.00
57	Microcontroller for Radio Frequency Data Communication	EEA 166	3	1,776.00
58	Microcontroller for Control System	EEA 167	3	1,776.00
59	Neural Network with MATLAB/Simulink for Control System Application	EEA 168	3	1,776.00

# COURSE LIST

## ELECTRICAL ELECTRONICS & AUTOMATION MODULES

No	Course Title	Course Code	Duration	Training Fee
60	Electrical Safety & Machine Safeguarding	EEA 169	2	1,440.00
61	Electrical Engineering for Non-Electrical Engineers	EEA 170	3	1,776.00
62	Feedback Control System	EEA 171	3	1,776.00
63	Industrial Communication	EEA 172	5	2,400.00
64	GPS Positioning with PIC Microcontroller	EEA 173	2	1,440.00
65	Advanced Design Systems for RF Microelectronics	EEA 174	4	2,076.00
66	PLC OMRON (Analog and Real Time Application)	EEA 175	3	1,776.00
67	Practical Signal & Image Processing: Theory & Application	EEA 176	3	1,776.00
68	Mechatronics System Troubleshooting	EEA 177	3	1,776.00
69	Optical Proximity Sensing Technology: Basic Principles & Applications in Object Detection	EEA 178	3	1,776.00
70	PLC for Control System (with Touch Screen Panel)	EEA 179	3	1,776.00
71	Electronic Product Quality Control	EEA 180	3	1,776.00
72	Automation Handling System	EEA 181	3	1,776.00
73	Digital Electronics & Application	EEA 184	4	2,076.00
74	Advanced Design Systems for RF Microelectronics	EEA 185	4	2,076.00
75	Electronic Devices and Circuits	EEA 186	4	2,076.00

# COURSE LIST

## ELECTRICAL ELECTRONICS & AUTOMATION MODULES

No	Course Title	Course Code	Duration	Training Fee
76	Signal Processing and Embedded System	EEA 187	4	2,076.00
77	Essence of Telecommunication	EEA 188	4	2,076.00
78	Electrical System Design	EEA 189	3	1,776.00
79	Custom Analog Mixed Signal VLSI Design & Verification	EEA 190	4	2,076.00
80	The Principle of Signal Processing and Systems	EEA 191	4	2,076.00
81	Linear Systems and Signals	EEA 192	4	2,076.00
82	Analog Circuit Design Fundamentals	EEA 193	4	2,076.00
83	Semiconductor Devices and Technology	EEA 194	4	2,076.00
84	Transmission Line Theory & Practise for RF and Microwave Apps	EEA 195	4	2,076.00
85	Modern Control Engineering	EEA 196	4	2,076.00
86	Wireless Communication System Development & Verification	EEA 197	4	2,076.00
87	RF And Microwave Transmission Line Simulation and Analysis	EEA 198	4	2,076.00
88	Introduction to Writing Verilog Codes	EEA 199	3	1,776.00
89	Fundamentals of Electrical & Electronics	EEA 201	3	1,776.00
90	Power Electronics: Design, Simulate & Analysis using MATLAB	EEA 202	3	1,776.00
91	Fundamentals of VLSI Design and Verification Phase 2	EEA 203	10	4,200.00

# COURSE LIST

## ELECTRICAL ELECTRONICS & AUTOMATION MODULES

No	Course Title	Course Code	Duration	Training Fee
92	Autonomous System	EEA 204	5	2,400.00
93	System Integration	EEA 205	4	2,076.00
94	Automotive Diagnostics Using Scanner Tools	EEA 206	3	1,776.00
95	PCB Design and Fabrication	EEA 207	3	1,776.00
96	Basic 3D Scanner	EEA 208	3	1,776.00
97	Practical On Data Acquisition Using Ni-Daq And Labview	EEA 210	3	1,776.00
98	Basic Electrical and Electronics Trouble Shooting	EEA 211	3	1,776.00
99	Genetics Algorithm for Optimization of Engineering process with MATLAB / Simulink	EEA 212	3	1,776.00
100	Photovoltaic Systems for Automotive	EEA 213	3	1,776.00
101	IOT for Mechatronics	EEA 214	3	1,776.00
102	Mastering Drone Maintenance	EEA 215	3	1,776.00
103	Designing Electronic Circuits (PCB Design)	EEA 216	3	1,776.00

# COURSE LIST

## MANUFACTURING / MACHINING MODULES

No	Course Title	Course Code	Duration	Training Fee
1	Conventional Lathe & Basic CNC Machining	MMF 101	3	1,776.00
2	Advanced Conventional Turning (Lathe)	MMF 101 (2)	3	1,776.00
3	Milling Operation	MMF 102	2	1,440.00
4	CNC Lathe Programming & Machining	MMF 103	3	1,776.00
5	CNC Milling Programming & Machining	MMF 104	3	1,776.00
6	Electrical Discharge Machining (EDM) Wire Cut Programming & Machining	MMF 106	3	1,776.00
7	Electrical Discharge Machining (EDM) Die Sinking Programming & Machining	MMF 107	3	1,776.00
8	Tool & Die Design Technology	MMF 109	3	1,776.00
9	Conventional Machine Maintenance	MMF 111	3	1,776.00
10	Tool Cutter Grinder	MMF 112	3	1,776.00
11	CNC Turret Punching	MMF 114	3	1,776.00
12	Mould Design	MMF 115	3	1,776.00
13	Mould Fabrication	MMF 116	3	1,776.00
14	Introduction to Automotive Assembly Operation	MMF 117	3	1,776.00
15	Welding, Painting and Final Assembly	MMF 118 (T)	3	1,776.00
16	Manufacturing Engineering Techniques - (Layout, process flow/charts, material handling and automation)	MMF 119 (T)	3	1,488.00

# COURSE LIST

## MANUFACTURING & INDUSTRIAL MACHINING MODULES

No	Course Title	Course Code	Duration	Training Fee
17	Lean Manufacturing Operation for Profitable Production (Theory)	MMF 120 (T)	3	1,488.00
18	Application of Maynard Operation Sequence Techniques (MOST) (Theory)	MMF 121 (T)	3	1,488.00
19	Single Minutes Exchange of Die (SMED) (Theory)	MMF 122 (T)	3	1,488.00
20	Value Stream Mapping (VSM) Current and Future State	MMF 123 (T)	3	1,488.00
21	Design of Experiment (DOE) (Theory)	MMF 125 (T)	3	1,488.00
22	Objectives and Elements of Production Planning Control (PPC) (Theory)	MMF 126 (T)	3	1,488.00
23	Wire-Cut with Master Cam	MMF 127	3	1,776.00
24	Workshop Management & Operations	MMF 125	3	1,776.00
25	Grinding Technology	MMF 128	3	1,776.00
26	Pre Production (Theory)	MMF 129 (T)	3	1,488.00
27	Product Planning (Theory)	MMF 130 (T)	3	1,488.00
28	Equipment Maintenance (Theory)	MMF 131 (T)	3	1,488.00
29	Basic Industrial & Manufacturing Engineering (Theory)	MMF 134 (T)	3	1,488.00
30	Principles of Jig & Fixture Design	MMF 135	3	1,776.00

# COURSE LIST

## MANUFACTURING & INDUSTRIAL MACHINING MODULES

No	Course Title	Course Code	Duration	Training Fee
31	5 Axis CNC Milling	MMF 136	4	2,076.00
32	Plastic Injection Operation	MMF 137	3	1,776.00
33	Manufacturing Process Technology	MMF 138	3	1,776.00
34	Inventory Demand Forecasting	MMF 139	3	1,488.00
35	Fundamentals of Cutting Tools for Machine Processes	MMF 140	3	1,776.00
36	Inventory Management (Theory)	MMF 141	3	1,488.00
37	CNC Milling, Tool Selection & Optimization	MMF 142	3	1,488.00
38	Precision Turning Technology	MMF 143	2	1,440.00

# COURSE LIST

## MECHANICAL ENGINEERING MODULES

No	Course Title	Course Code	Duration	Training Fee
1	Bearing Technology & Maintenance	MEC 101	3	1,776.00
2	Solidworks Motion & Fluid Flow Simulation	MEC 102	3	1,776.00
3	Machine Safeguarding	MEC 104	3	1,776.00
4	Welding Inspection	MEC 105	3	1,776.00
5	Conveyer Design & Machine Maintenance	MEC 106	3	1,776.00
6	Model Making Technique in Product Design	MEC 107	3	1,776.00
7	Metallurgy and Corrosion	MEC 108	3	1,776.00
8	Shaft Alignment	MEC 109	3	1,776.00
9	Engine Vibration Measurement	MEC 110	3	1,776.00
10	Smart Manufacturing (Robot & Automation)	MEC 111	3	1,776.00
11	Non-Destructive Test for Crack and Flaw Detection	MEC 112	3	1,776.00
12	Simulations using Finite Element Analysis (FEA)	MEC 113	3	1,776.00
13	Introduction to Fluid Mechanics	MEC 115	3	1,776.00
14	Piping Systems and Pump Selection	MEC 116	3	1,776.00
15	Heat Treatment Technology	MEC 117	3	1,776.00

# COURSE LIST

## MECHANICAL ENGINEERING MODULES

No	Course Title	Course Code	Duration	Training Fee
16	Welding Process (SMAW)	MEC 118	3	1,776.00
17	Applied Material	MEC 119	3	1,776.00
18	Advanced CAM	MEC 120	3	1,776.00
19	CVT Gearbox Transmission	MEC 121	3	1,776.00
20	Soft Tools Elements	MEC 125	3	1,776.00
21	CVT Gearbox Transmission	MEC 126	3	1,776.00
22	Welding Technology and Hardness & Charpy Test	MEC 127	3	1,776.00

# COURSE LIST

## INDUSTRIAL ORGANIZATION, QUALITY ASSURANCE & SAFETY MODULES

No	Course Title	Course Code	Duration	Training Fee
1	5S Practices at Workplace	IO 101	3	1,488.00
2	ISO 9001 QMS	IO 102	3	1,488.00
3	Continuous Improvement	IO 103	3	1,488.00
4	Managing People - OSHA, Industrial Relations, Employment Act, Leadership and Team Building	IO 104	3	1,488.00
5	Total Cost of Ownership and Excel	IO 105	3	1,488.00
6	Manufacturing Planning	IO 106	3	1,488.00

## QUALITY ASSURANCE

No	Course Title	Course Code	Duration	Training Fee
1	7 MP Tools for Total Quality Control	QA 101	2	1,260.00
2	7 QC Tools for Quality Improvement	QA 102	2	1,260.00
3	Objectives and elements of Production Planning & Control	QA 103	3	1,488.00
4	Quality Control and Problem Solving Techniques in Automotive Assembly Operations	QA 104	2	1,260.00
5	Master Production Scheduling & Shop Floor Control (MPS and ALC)	QA 105	3	1,488.00
6	Bills of Materials & Material Requirement Planning (BOM and MRP)	QA 106	3	1,488.00
7	Problem Solving Skill by Using Innovative and Creativity Circle(ICC)	QA 107	3	1,488.00

# COURSE LIST

## QUALITY ASSURANCE

No	Course Title	Course Code	Duration	Training Fee
8	TQM Awareness	QA 108	2	1,260.00
9	ISO 9001 QMS	QA 109	2	1,260.00
10	Industrial Safety & Health (OSHA)	QA110	2	1,260.00
11	Workshop Management & Cost Estimation	QA 111	3	1,488.00
12	Total Productive Maintenance	QA 112	2	1,260.00
13	Root Cause Analysis	QA 113	2	1,260.00

## SKILLS UPGRADING & DEVELOPMENT

No	Course Title	Course Code	Duration	Training Fee
1	Spanish for Beginners: Meeting & Greeting	HD 101	3	1,488.00
2	Basic Mandarin	HD 102	3	1,488.00
3	Statistical Process Control	HD 103	3	1,488.00
4	Advanced Ms Excel Programming	HD 106	3	1,488.00
5	Analyzing Data with Power BI	HD 107	3	1,488.00

# COURSE LIST

## ENGINEERING DESIGN MODULES

No	Course Title	Course Code	Duration	Training Fee
1	Creo Parametric 2.0	DS 101	3	1,776.00
2	Technical Drawing	DS 102	2	1,440.00
3	CATIA V6	DS 104	3	1,776.00
4	Product Development with Additive Manufacturing	DS 105	3	1,776.00
5	Mechanical CAD - Solid Works	DS 106	3	1,776.00
6	AutoCAD 2D	DS 107	3	1,776.00
7	Introduction to Product Design and Development	DS 108 (T)	3	1,776.00
8	MasterCAM X6	DS 109	3	1,776.00
9	Geometry Drawing & Fitting Work	DS 110	3	1,776.00
10	Pictorial and Machine Drawing	DS 111	3	1,776.00
11	Autodesk Inventor for Designers	DS 112	3	1,776.00
12	3D Modelling using SolidWorks	DS 113	3	1,776.00
13	Product Design & Analysis	DS 114	3	1,776.00
14	CAD/CAM for Manufacturing Process	DS 115	3	1,776.00

# COURSE LIST

## METROLOGY MODULES

No	Course Title	Course Code	Duration	Training Fee
1	Applied Industrial Metrology	MET 101	3	1,776.00
2	Angular Measurement by Direct & Indirect Measurement	MET 102	3	1,776.00
3	Geometric Dimensioning & Tolerancing (GD&T)	MET 103	3	1,776.00
4	Optical Metrology through Profile Projector	MET 104	3	1,776.00
5	Measurement through CMM	MET 105	3	1,776.00
6	Measurement System Analysis (MSA) through Gauge Repeatability & Reproducibility (GR&R)	MET 106	3	1,776.00
7	Surface Finish Measurement	MET 107	3	1,776.00

# COURSE LIST

## IR 4.0 & IOT MODULES

No	Course Title	Course Code	Duration	Training Fee
1	Additive Manufacturing	IR 103	2	1,200.00
2	Big Data Analytics	IR 104	3	1,480.00
3	Android Apps Development	IR 105	3	1,480.00
4	Visual Basic Programming 1	IR 106 (L1)	3	1,480.00
5	Visual Basic Programming 2	IR 106 (L2)	3	1,480.00
6	Project Management	IR 107	3	1,480.00
7	Human Machine Interface (HMI) in Visual Basic	IR 108	3	1,480.00
8	Development of IoT Application with Arduino & Cloud Computing	IR 109	4	1,730.00
9	Development of IoT Application with Node MCU & Cloud Computing	IR 110	4	1,730.00
10	Development of IoT Application with Raspberry PI & Cloud Computing	IR 111	4	1,730.00
11	Embedded System with Arduino using C Programming Language	IR 112	3	1,480.00
12	Embedded System with Raspberry PI using Python	IR 113	3	1,480.00
13	Java Programming	IR 114	3	1,480.00
14	Programming for Everybody (getting started with Python)	IR 115	3	1,480.00
15	C/C++ for Engineers	IR 116	3	1,480.00

# COURSE LIST

## IR 4.0 & IOT MODULES

No	Course Title	Course Code	Duration	Training Fee
16	IOT Architecture	IR 117	2	1,200.00
17	Fundamentals of Web Design	IR 118	3	1,480.00
18	Web Programming	IR 119	3	1,480.00
19	Cyber Security for Education Practitioners	IR 120	3	1,480.00
20	Computer Vision	IR 121	3	1,480.00
21	Database Development using MS Access	IR 122	3	1,480.00
22	ESP IoT Street Light With MATLAB ThingSpeak	IR 123	3	1,480.00
23	Wireless Communication System Development & Verification (IOT)	IR 124	3	1,480.00
24	Artificial Intelligence in Manufacturing	IR 125	3	1,480.00
25	Pattern Recognition for Manufacturing	IR 126	3	1,480.00
26	Smart Manufacturing for F & B	IR 127	3	1,480.00

## OUR TERMS AND CONDITIONS:

**1. Training Dates and Times:** For customized trainings, clients are welcome to suggest any dates that they feel are suitable for their company/organization.

**2. Training Venue:** Our trainings will be conducted on campus at Universiti Kuala Lumpur Malaysian Spanish Institute, Kulim Hi Tech Park, Kulim Kedah. However, clients may suggest conducting the training at their venue if the equipment required is available.

### 3. Fee Structure:

- No registration fee is required to secure your spot. Clients/trainees are required to sign a non-closure agreement to secure their training spot.
- Course Fee: The total cost of the training fee covers all instructional materials and sessions, including meals on campus.
- Exam or Assessment Fee (if applicable): An examination fee is applicable for professional certification courses.
- The class requires a minimum of 10 participants, and the maximum capacity is set at 30 participants.

### 4. Payment Methods:

- Accepted Payment Methods: We accept payments through cash, cheque, or bank transfer.
- For group enrollment, all of our courses are HRDC Claimable (SBL Khas). However, please contact us for further clarification.

### 5. Cancellation Policy:

- Cancellation Terms: Cancellations must be made in writing [5 days] before the start date for a full refund.
- Refund Policy: Refunds, if applicable, will be processed within [7 days] after approval. A 5% administrative fee may apply.

### 6. Facilities and Benefits:

- Benefits of Enrolling: Participants will gain access to expert instruction, comprehensive learning materials, and practical hands-on experience.
- Additional Benefits: As part of our training, participants will receive resources, certificates, and support services during the training program.

### 7. Contact Information:

- For inquiries, please contact Mohamed Yusof Radzak at [myusofr@unikl.edu.my](mailto:myusofr@unikl.edu.my) or 013-4305528

### 8. Promotions or Discounts (if applicable):

- Contact us to discover more about available discounts for group registrations or early bird sign-ups. We offer special rates for those who register as a group or sign up early. Please get in touch for details.