

BACHELOR OF SCIENCE (INDUSTRIAL PHYSICS)

SSCFH 20202021

SEMESTER 1			SEMESTER 2		
Code	Name of Courses	cr	Code	Name of Courses	Cr
UHS 1022	Philosophy and current issue	2	UHLB 1112	English Communication Skills	2
SSCM 1023	Mathematical Methods I	3	UHLM 1012	Malay Language for Communication 2	2
SSCP 1102	Introduction to Physics Program	2	UHMS 1182	(International Students)* Appreciation of Ethics and Civilisation (Local Students)*	
			UHS 1022	Philosophy and current issue	2
			OR UHMS 1182	Appreciation of Ethics and Civilisation (International Students)*	
SSCP 1143	Mechanics	3	SSCP 1163	Sound, Wave and Optics	3
SSCP 1153	Electricity and Magnetism	3	SSCP 1223	Modern Physics	3
SSCP 1811	Practical Physics I	1	SSCM 1523	Linear Algebra	3
			SSCM 1033	Mathematical Methods II	3
			SSCP 1821	Practical Physics II	1
Total credit hours		14	Total credit hours		17
SEMESTER 3			SEMESTER 4		
Code	Name of Courses	cr	Code	Name of Courses	Cr
UHIT 2302	Scientific and Technological Thinking	2	UHLB 2122	Academic Communication Skills	2
UBSS 1032	Introduction to Entrepreneurship	2	UHMT 1012	Graduate Success Attributes	2
SSCP 2313	Basic Electronics	3	UKQF 2082	Community and Science	2
SSCP 2333	Computer Programming	3	SSCP 2113	Thermodynamics	3
SSCP 2811	Practical Physics III	1	SSCP 2413	Solid State Physics	3
SSCP 2213	Nuclear Physics	3	SSCP 2613	Mathematical Physics	3
SSCM 1703	Differential Equations I	3	SSCP 2821	Practical Physics IV	1

Total credit hours	17	Total credit hours	16
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SEMESTER 5			SEMESTER 6		
Code	Name of Courses	cr	Code	Name of Courses	Cr
UHLB 3132	Professional Communication Skills	2	UHL* 1112	Foreign Language Electives	2
U*** 2**2	Elektif Perluasan Ilmu/ Elektif Kemahiran Insaniah	2	UKQT 3001	Extra-Curricular Experiential Learning (ExCEL)	1
SSCP 3323	Advanced Electronics	3	SSCP 3821	Practical Physics VI	1
SSCP 3811	Practical Physics V	1	SSCP 3343	Instrumentation and Data Acquisition	3
SSCP 3113	Electromagnetism	3	SSCP 3613	Quantum Mechanics	3
SSCP 3133	Thermal and Statistical Physics	3			
Management Elective (Choose 3 credits)			Management Elective (Choose 6 credits)		
SHAC 1023	Financial Accounting	3	SHAF 1013	Principles of Marketing	3
SHAD 1033	Principles of Management	3	SHAD 1043	Organizational Behaviors	3
			SSCP 3433	Quality Control	3
Total credit hours		17	Total credit hours		16
SHORT SEMESTER					
Code	Name of Course	cr			
SSCU 3905	Industrial Training (HW)	5			
Total credit hours		5			
SEMESTER 7			SEMESTER 8		
Code	Name of Courses	cr	Code	Name of Courses	Cr
SSCU 4902	Undergraduate Project 1	2	SSCU 4904	Undergraduate Project II	4
Electives (Choose 12 credits from a group)			Electives (Choose 12 credits from a group)		

Group A			Group A		
SSCP 4123	Nondestructive Testing and Evaluation	3	SSCP 4013	Data Processing	3
SSCP 4133	Industrial Electronics	3	SSCP 4303	Process Control	3
SSCP 4143	Electronics Circuit Simulation	3	SSCP 4353	Ultrasonic Techniques	3
SSCP 4333	Digital Signal Processing	3	SSCP 4363	Electronics Testing and Maintenance	3
SSCP 4393	Computer Interfacing	3	SSCP 4373	Communication Electronics	3
Group B			Group B		
SSCP 4223	Radiation detection	3	SSCP 4253	Medical Physics	3
SSCP 4233	Radiation Protection	3	SSCP 4263	Occupational Health and Safety	3
SSCP 4243	Applied Radiation Physics	3	SSCP 4273	Nuclear Energy	3
SSCP 4293	Radiation Dosimetry	3	SSCP 4283	Environmental Radiation Protection	3
SSCP 4913	Radiobiology	3	SSCP 4203	Medical Radiation Protection	3
Group C			Group C		
SSCP 4623	Material Science	3	SSCP 4463	Corrosion Sciences	3
SSCP 4633	Ceramic and Amorphous Material	3	SSCP 4473	Spectroscopy and Material Analysis	3
SSCP 4643	Polymer Science	3	SSCP 4483	Semiconductor Physics	3
SSCP 4603	Vacuum and Thin Film Technology	3	SSCP 4443	Magnetic Material	3
SSCP 4493	Metallurgy	3	SSCP 4403	Microscopy and Material Analysis	3
Group D			Group D		
SSCP 4713	Introduction to Nonlinear Optics	3	SSCP 4553	Applied Optics	3
SSCP 4523	Laser Technology	3	SSCP 4563	Photonics	3
SSCP 4533	Fibre Optics Technology	3	SSCP 4573	Laser in Medicine	3
SSCP 4543	Optoelectronics	3	SSCP 4583	Photometric	3
SSCP 3523	Modern Optics	3	SSCP 4593	Solid State Laser Engineering	3
Total credit hours		14	Total credit hours		16