7. Scheme of Studies

Industrial and Manufacturing Engineering								
First Year								
Fall Semester					**Spring Semester**			
Course Code	**Course Title**	**Credit Hrs**			**Course Code**	**Course Title**	**Credit Hrs**		
		Th	**Pr**	**Total**			**Th**	**Pr**	**Total**
ME-101	Engineering Mechanics	3	1	4	PH-122	Applied Physics	3	1	4
ME-104	Workshop Practice	0	2	2	HS-111	Functional English	2	0	2
HS-105 HS/127	Pakistan Studies or Pakistan Studies for Foreigners	2	0	2	IM-101	Computer Applications in Engineering	2	1	3
MT-114	Calculus	3	0	3	IM-105	Thermofluids	3	1	4
EE-122	Basic Electricity and Electronics	3	0	3	ME-111	Engineering Drawing	2	1	3
	Total	**11**	**3**	**14**		**Total**	**12**	**4**	**16**
Second Year								
Fall Semester					**Spring Semester**			
Course Code	**Course Title**	**Credit Hrs**			**Course Code**	**Course Title**	**Credit Hrs**		
		Th	**Pr**	**Total**			**Th**	**Pr**	**Total**
IM-203	Manufacturing Processes	3	1	4	IM-211	Machine Design	3	1	4
IM-208	Materials Engineering	3	1	4	IM-212	Computer Aided Engineering Design	2	1	3
IM-209	Mechanics of Materials	3	1	4	IM-213	Metrology and Quality Control	3	1	4
MT-252	Introduction to Probability and Statistics	3	1	4	MF-303	Applied Economics for Engineers	3	0	3
HS-205 / HS-209	Islamic Studies / Ethical Behavior	2	0	2	MT-225	Linear Algebra & Ordinary Differential Equations	3	0	3
					HS-200	Community Service	-	-	NC
	Total	**14**	**4**	**18**		**Total**	**14**	**3**	**17**
Third Year								
Fall Semester					**Spring Semester**			
Course Code	**Course Title**	**Credit Hrs**			**Course Code**	**Course Title**	**Credit Hrs**		
		Th	**Pr**	**Total**			**Th**	**Pr**	**Total**
IM-303	Production Management	3	1	4	IM-307	Advanced Manufacturing Processes	3	1	4
IM-310	Tool Design	3	1	4	IM-308	Operations Research	3	1	4
IM-312	Applied Thermofluids	3	1	4	IM-320	Modeling and Simulation	2	1	3
MT-333	Advanced Calculus & Fourier Analysis	3	0	3	IM-408	Automation & Robotics	3	1	4
HS-304	Business Communication & Ethics	3	0	3	IM-411	Methods Engineering	2	1	3
					HSK-I	Chinese Language OR	-	-	NC
					HS-231	Turkish Language-I	-	-	NC
	Total	**15**	**3**	**18**			**13**	**5**	**18**
Final Year								
Fall Semester					**Spring Semester**			
Course Code	**Course Title**	**Credit Hrs**			**Course Code**	**Course Title**	**Credit Hrs**		
		Th	**Pr**	**Total**			**Th**	**Pr**	**Total**
IM-402	Computer Aided Manufacturing	3	1	4	IM-413	Plant Engineering	3	1	4
IM-405	Finite Element Analysis	3	1	4	IM-417	Health, Safety & Environment	2	1	3
*IM-##	Elective Course	3	1	4	MG-481	Entrepreneurship	3	0	3
MG-450	Principles of Supply Chain Management	3	0	3	MT-441	Advanced Mathematical Techniques	3	0	3
IM-409	Final Year Design Project	0	3	3	IM-409	Final Year Design Project	0	3	3
HSK-II	Chinese Language OR	-	-	NC					
HS-232	Turkish Language-II	-	-	NC					
	Total	**12**	**5**	**17**		**Total**	**11**	**5**	**16**
Elective Courses								
IM-416	Management Information System				IM-420	Basics of Additive Manufacturing			
IM-418	Condition Monitoring				IM-421	Smart Manufacturing System			
IM-419	Project Management				IM-422	Ergonomics in Workplace Design			