

SEMESTER-I					
Course Code	Course Name	Knowledge Area/Domain	Credit Hours		Total Credit Hours
			Theory	Practical	
ISL-501/ETH-501	Islamic Studies/Professional Ethics	Civilization – I	2	0	2
PHY-510 & 510L	Applied Physics	Natural Science	2	1	3
MTH-530	Applied Mathematics-I	Natural Science	3	0	3
CHEM-515 & 515L	Applied Chemistry	Natural Science Elective-1	2	1	3
CS-501 & 501L	Computer Fundamentals	Computer Science	1	2	3
MET-620 & 620L	Workshop Technology	Engineering Foundation	1	2	3
<b>Total</b>			<b>11</b>	<b>6</b>	<b>17</b>
SEMESTER-II					
Course Code	Course Name	Knowledge Area/Domain	Credit Hours		Total Credit Hours
			Theory	Practical	
ICT 501	Information and Communication Technologies	Quantitative and Reasoning E1	3	0	3
PKS-501	Pakistan Studies	Civilization – 2	2	0	2
MET-610 & 610L	Technical Drawing and Graphics	Engineering Foundation	1	2	3
MET-612 & 612L	Applied Mechanics	Engineering Foundation	2	1	3
EET-600 & 600L	Basic Electrical & Electronics	Engineering Foundation	2	2	4
MET-624	Introduction to Industrial Management	Major based Breadth	2	0	2
<b>Total</b>			<b>12</b>	<b>5</b>	<b>17</b>
SEMESTER-III					
Course Code	Course Name	Knowledge Area/Domain	Credit Hours		Total Credit Hours
			Theory	Practical	
ENG-503	Communication Skills	Expository Writing E1	3	0	3
MET-611L	Computer aided drafting and Modeling	Major based Breadth	0	2	2
MET-621 & 621L	Industrial Materials	Engineering Foundation	2	1	3
MET-614 & 614L	Mechanics of Material	Engineering Foundation	2	1	3
MET-600 & 600L	Applied Thermodynamics	Engineering Foundation	3	1	4
CS-502 & 502L	Computer Programming	Computer Science	1	1	2
<b>Total</b>			<b>11</b>	<b>6</b>	<b>17</b>

SEMESTER-IV					
Course Code	Course Name	Knowledge Area/Domain	Credit Hours		Total Credit Hours
			Theory	Practical	
MET-616	Machine Design	Major based Breadth	2	0	2
MET-602 & 602L	Fluid Mechanics and Hydraulic machines	Major based Breadth	3	1	4
PSY-500	Psychology	Social Sciences – E1	1	0	1
STS-503 & 503L	Probability and Statistics	Quantitative and Reasoning E2	2	1	3
ENG 501 & 501L	Functional English	Expository Writing E2	1	1	2
ENT-501 & 501L	Entrepreneurship	Social Sciences E2	2	1	3
MET-623 & 623L	Industrial maintenance and Safety	Major based Breadth	2	1	3
Total			13	5	18
SEMESTER-V					
Course Code	Course Name	Knowledge Area/Domain	Credit Hours		Total Credit Hours
			Theory	Practical	
ME-604 & 604L	Heat and Mass Transfer	Major based Depth	2	1	3
MET-641 & 641L	Energy and Power Technologies	Major based Depth	2	1	3
MET-698L	Project-I	Major based depth	0	3	3
MET-622 & 622L	Manufacturing Processes	Major based Breadth	2	1	3
MGT-522 & 522L	Project Management (BBA Dept)	Major based Breadth	2	1	3
ECO-501	Economics (BBA Dept)	Social Sciences – E3	2	0	2
Total			10	7	17
SEMESTER-VI					
Course Code	Course Name	Knowledge Area/Domain	Credit Hours		Total Credit Hours
			Theory	Practical	
MET-630 & 630L	Instrumentation and Control	Major based Breadth	2	1	2
MET-632 & 632L	Mechanical Vibration	Major based Depth	2	1	2
MET-605 & 605L	Heating, Air-condition and Ventilation Technologies	Major based Depth	2	1	2
MGT-527	Total Quality Management (BBA Dept)	Major based Breadth	2	1	2
MET-699L	Project-II	Major based depth	0	3	0
Total			8	7	15
SEMESTER-VII					
Course Code	Course Title	Knowledge Area/Domain	Credit Hours		Total Credit Hours
			Theory	Practical	
	16 Weeks Supervised Industrial/ Field Training (8x5=40 Hrs / Week)	Major Depth	0	16	16
MET-607 & 607L	Breadth Elective-I (Alternate Energy Resource)	Breadth Elective-I	2	1	3
MET-624 & 624L	Breadth Elective-II (Metrology)	Breadth Elective-II	2	1	3
MET-625 & 625L	Depth Elective-I (Polymer)	Depth Elective-I	2	1	3
MET-626 & 626L	Depth Elective-II (Nanotechnology)	Depth Elective-II	2	1	3

MET-627 & 627L	Depth Elective-III (Corrosion Control Technology)	Depth Elective-III	3	1	4
<b>Total</b>			<b>11</b>	<b>5</b>	<b>16</b>
<b>SEMESTER-VIII</b>					
Course Code	Course Name	Knowledge Area/Domain	<b>Credit Hours</b>		Total Credit Hours
			Theory	Practical	
MET-628L	16 Weeks Supervised Industrial/ Field Training (8x5=40 Hrs / Week)	Major Depth	0	16	16
<b>Total</b>			<b>0</b>	<b>16</b>	<b>16</b>
<b>Total Credit Hours &amp; Contact Hours in Four Years</b> (When SIT conducted in both 7 <sup>th</sup> and 8 <sup>th</sup> Semester)			<b>Credit Hours</b>		<b>Contact Hours</b>
			<b>65+68 = 133</b>		<b>65+204=269</b>
Theory vs Practical with respect to Contact Hours			Theory Practical		65 (24.16%) 204 (75.84%)
<b>Total Credit Hours &amp; Contact Hours in Four Years</b> (When optional courses conducted instead of SIT in 7 <sup>th</sup> semester)			<b>76+57 = 133</b>		<b>76+171 =247</b>
Theory vs Practical with respect to Contact Hours			Theory Practical		76 (30.77%) 171 (69.23%)