Education for SDGs Commitment to Meaningful Education

The University of Poonch Rawalakot (UPR) is dedicated to promoting meaningful education on the Sustainable Development Goals (SDGs) throughout the university by incorporating them into various academic programs. The Faculty of Engineering and Technology offers a program in Software Engineering Technology, where SDGs are integrated into all the courses. The details are as follows:

SEMESTER-I				
Course Code	**Course Title**	**Knowledge Area/Domain**	**Credit Hrs. (Th+Lab)**	**17 UN SDGs alignment**
NS-111	Applied Physics	Natural Sciences(Gen. Edu)	3(2+1)	4,7
NS-112	Applied Calculus and Analytical Geometry	Quantitative Reasoning-I(Gen. Edu)	2(2+0)	4
HS-113	Islamic Studies / Ethics	Islamic Studies/Ethics (Gen. Edu)	2(2+0)	5,10
HS-114	Functional English	Expository Writing-I	3(3+0)	4
CS-115	Applications of Information and Communication Technologies	Applications of Information and Communication Technologies (ICT) (Gen. Edu)	3(1+2)	9
CS-116	Computer Programming	Software Engineering Technology Foundation	3(1+2)	9
	Subtotal		**16(11 + 5)**	

SEMESTER-II				
Course Code	**Course Title**	**Knowledge Area/Domain**	**Credit Hrs. (Th+Lab)**	**17 UN SDGs alignment**
HS-121	Professional Ethics(Social Sciences Elective-I)	Social Science (Gen. Edu)	2(2+0)	4, 8, 10
HS-122	Technical Writing	Expository Writing (Gen. Edu)	3(3+0)	07,13
NS-123	Discrete Structures	Quantitative Reasoning-II(Gen. Edu)	2(2+0)	9
SE-124	Software Configuration Management Technologies	Software Engineering Technology Foundation	2(1+1)	4, 9
CS-125	Object Oriented Programming	Software Engineering Technology Foundation	3(1+2)	9

Course Code	Course Title	Knowledge Area/Domain	Credit Hrs. (Th+Lab)	17 UN SDGs alignment
SE-126	Software Development Life Cycle	Software Engineering Technology Foundation	3(3+0)	8, 9
	Subtotal		**15(12 + 3)**	

Semester III

Course Code	Course Title	Knowledge Area/Domain	Credit Hrs. (Th+Lab)	17 UN SDGs alignment
NS-231	Probability and Statistics	Quantitative Reasoning-V(Gen. Edu)	3(3+0)	4, 8
EE-232	Digital Logic Design	Software Engineering Technology Foundation	3(2+1)	9, 11
CS-233	Data Structures and Algorithms	Software Engineering Technology Foundation	3(2+1)	4
SE-234	Software Requirements and Design	Software Engineering Technology Foundation	3(2+1)	8, 9
HS-235	Communication Skills	Arts and Humanities (Gen.Edu)	2(2+0)	4
CS-236	Database Systems	Software Engineering Technology Foundation	3(2+1)	4, 8, 9
	Subtotal		**17(13 +4)**	

Semester IV				
Course Code	Course Title	Knowledge Area/Domain	Credit Hrs. (Th+Lab)	17 UN SDGs alignment
HS-241	Pakistan Studies & Global Perspective	Ideology and Constitution of Pakistan (Gen. Edu)	2(2+0)	10, 16
EE-242	Embedded Systems Design	Interdisciplinary Distribution (IDE)	4(3+1)	4,9,11
SE-243	Web Development Technologies	Software Engineering Technology Breadth	3(1+2)	4, 8, 9
SE-244	Mobile app development	Software Engineering Technology Breadth	2(1+1)	4, 8, 9
SE-245	Software Construction & Development	Software Engineering Technology Breadth	3(2+1)	8, 9
SE-246	Artificial Intelligence Technologies	Software Engineering Technology Breadth	3(2+1)	3, 8, 9
	Subtotal		**17(12+6)**	

		Semester V		
Course Code	**Course Title**	**Knowledge Area/Domain**	**Credit Hrs. (Th+Lab)**	**17 UN SDGs alignment**
SE-351	Internet of things(Elective-I)	Software Engineering Technology Depth	3(2+1)	4, 8
SE-352	Operating Systems	Software Engineering Technology Foundation	3(2+1)	4, 8
SE-353	Software Testing Technologies	Software Engineering Technology Breadth	3(2+1)	4, 8, 9
SE-354	Software Project Management	Software Engineering Technology Breadth	2(1+1)	4, 8, 9,16
SE-355	Information Security	Software Engineering Technology Breadth	2(2+0)	4, 8, 9,16
SE-356	Computer Networking Technologies	Software Engineering Technology Breadth	3(2+1)	4, 8, 9
SE-357	Project-I	Software Engineering Technology Domain Project	3(0+3)	3,4,8,9,12, 13
	Subtotal		**19(11+8)**	

		Semester VI		
Course Code	**Course Title**	**Knowledge Area/Domain**	**Credit Hrs. (Th+Lab)**	**17 UN SDGs alignment**
SE-361	Machine learning	Software Engineering Technology Depth	3(2+1)	3, 8, 9
SE-362	Mobile and Wireless Networks	Software Engineering Technology Depth	3(2+1)	3, 8, 9
MS-363	Technopreneurship	Interdisciplinary Distribution (IDE)	3(3+0)	4,9
EE-364	Renewable Energy (IDTE-I)	Interdisciplinary Technology Elective	2(1+1)	7,8,9,12,1 3
BM-365	Bioinformatics (IDTE-II)	Interdisciplinary Technology Elective	2(1+1)	3,9,11,13
SE-366	Project-II	Software Engineering Technology Domain Project	3(0+3)	3,4,8,9,12,1 3
	Subtotal		**16(9+ 7)**	

	SEMESTER-VII		
Supervised Industrial Training- I	Software Engineering Technology Domain Industrial Training	16	40 (per Week)

	Subtotal		0+16= 16	0+40= 40

SEMESTER-VIII			
Supervised Industrial Training-II	Software Engineering Technology Domain Industrial Training	16	40 (per Week)
Subtotal		**0+16= 16**	**0+40= 40**

Similarly, Faculty of Engineering and technology offer a program on Computer Engineering technology where SDGs goals are integrated across all courses. The details are as follow:

SEMESTER-I				Weekly Contact Hrs. (Th+Lab)	SDGs Mapping
Course Codes	Course Title	Knowledge Area/Domain	Credit Hrs. (Th+Lab)		
CPH-111	Functional English	Art & Humanities	3+0	3+0	4
CPN-112	Applied Physics	Natural Sciences	2+1	2+3	4,7
CPN-113	Calculus and Analytical Geometry	Natural Sciences	3+0	3+0	4
CPH-114	Islamic Studies / Ethics	Art & Humanities	2+0	2+0	5,10
CPC-115	Information and Communication Technologies	Applications of Information and Communication Technologies	1+1	1+3	9
CPT-116	Electric Circuits	Computer Engineering Technology Foundation	2+1	2+3	3, 4, 8, 9
	Subtotal		**13+3 =16**	**13+9 =22**	

SEMESTER-II				Weekly Contact Hrs. (Th+Lab)	SDGs Mapping
Course Codes	Course Title	Knowledge Area/Domain	Credit Hrs. (Th+Lab)		
CPC-121	Computer Programming	Computing	1+2	1+6	9

Course Codes	Course Title	Knowledge Area	Credit Hrs. (Th+Lab)	Weekly Contact Hrs. (Th+Lab)	SDGs Mapping
CPT-122	Electronic Devices and Circuits	Computer Engineering Technology Foundation	2+1	2+3	3, 4, 8, 9
CPT-123	Technical Drawing	Computer Engineering Technology Foundation	0+1	0+3	9
CPN-124	Linear Algebra	Natural Sciences	3+0	3+0	4, 9
CPH-125	Pakistan Studies	Art & Humanities	2+0	2+0	10, 16
CPH-126	Communication Skills	Art & Humanities	3+0	3+0	4
CPT-127	Digital Logic Design	Computer Engineering Technology Foundation	2+1	2+3	9,11
	Subtotal		**13+5 =18**	**13+15 =28**	

SEMESTER-III

Course Codes	Course Title	Knowledge Area	Credit Hrs. (Th+Lab)	Weekly Contact Hrs. (Th+Lab)	SDGs Mapping
CPT-211	Operating Systems	Computer Engineering Technology Foundation	2+1	2+3	4, 8
CPT-212	Signals and Systems	Computer Engineering Technology Foundation	2+1	2+3	4,9
CPC-213	Data Structures and Algorithms	Computing	1+2	1+6	4
CPH-214	Technical Writing	Art & Humanities	3+0	3+0	07,13
UGE-215	Probability and Statistics (GE-Elective -1)	University Elective	3+0	3+0	4, 8
CPT-216	Computer Hardware Systems	Computer Engineering Technology Foundation	1+1	1+3	9
	Subtotal		**12+5 =17**	**12+15 =27**	

SEMESTER-IV

Course Codes	Course Title	Knowledge Area	Credit Hrs. (Th+Lab)	Weekly Contact Hrs. (Th+Lab)	SDGs Mapping
CPT-221	Instrumentation and Data Acquisition	Computer Engineering Technology Breadth Core	1+1	1+3	4,9
CPT-222	Web Technologies	Computer Engineering Technology Breadth Core	2+1	2+3	4, 8, 9

CPT-223	Mobile Application Development	Computer Engineering Technology Breadth Core	2+1	2+3	4, 8, 9
CPT-224	Database Applications	Computer Engineering Technology Breadth Core	1+1	1+3	4, 8, 9
CPT-225	Embedded Systems	Inter Disciplinary	2+1	2+3	4,9,11
CPH-226	Environment, Health, and Safety	Civics and Community Engagement	3+0	3+0	3,8,13
	Subtotal		**11+5 =16**	**11+15 =26**	

SEMESTER-V				**Weekly Contact Hrs. (Th+Lab)**	**SDGs Mapping**
Course Codes	**Course Title**	**Knowledge Area**	**Credit Hrs. (Th+Lab)**		
CPT-311	Systems and Network Administration	Computer Engineering Technology Breadth Core	1+1	1+3	4, 9, 11
CPT-312	Network Technologies	Computer Engineering Technology Breadth Core-	2+1	2+3	4, 9, 11
CPM-313	Organizational Behavior	Management Sciences	2+0	2+0	8
CPT-314	Digital System Design (Depth Elective -1)	Computer Engineering Technology Depth Elective	2+1	2+3	5,9,11
CPT-315	Sensor Network and Application (Depth Elective -2)	Computer Engineering Technology Depth Elective	2+1	2+3	3, 8, 9, 11
CPM-316	Technopreneurship	Inter Disciplinary	3+0	3+0	4,9
	Subtotal		**12+4 = 16**	**12+12 =24**	

SEMESTER-VI				**Weekly Contact Hrs. (Th+Lab)**	**SDGs Mapping**
Course Codes	**Course Title**	**Knowledge Area**	**Credit Hrs.(Th+Lab)**		
CPT-321	Network Switching and Routing (Depth Elective -3)	Computer Engineering Technology Depth Elective	2+1	2+3	4,8,9,11
CPT-322	System Security (Depth Elective -4)	Computer Engineering Technology Depth Elective	2+1	2+3	8,9,16

IDE-323	Electromechanical Systems (IDTE – 1)	Inter Disciplinary Elective-I	2+1	2+3	4,9
IDE-412	Bioinformatics (IDTE – 2)	Inter Disciplinary Elective-II	2+1	2+3	3,9,11,13
CPH-325	Professional Ethics	Art & Humanities	2+0	2+0	8,10,17
CPT-326	Project-1	Senior Design Project-II	0+3	0+9	3,4,8,9,12,13
	Subtotal		**10+7 =17**	**10+21 =31**	

Semester VII			Credit Hrs.(Th+Lab)	Weekly Contact Hrs. (Th+Lab)	SDGs Mapping
Course Codes	**Course Title**	**Knowledge Area**			
CPT-411	Cloud Computing	Computer Engineering Technology Breadth Core	2+1	2+3	4,9, 13
UGE-412	Numerical Methods (GE- Elective -2)	University Elective-II	3+0	3+0	4
CPT-413	Hardware Description Language (Depth Elective -5)	Computer Engineering Technology Depth Elective	2+1	2+3	5,9
CPT-414	Machine Learning and Data Analytics (Depth Elective -6)	Computer Engineering Technology Depth Elective	2+2	2+6	3, 8, 9
CPT-415	Project-2	Senior Design Project-II	0+3	0+9	3,4,8,9,12,13
	Subtotal		**9+7=16**	**9+21 =30**	

SEMESTER-VIII			Credit Hrs. (Th+Lab)	Weekly Contact Hrs. (Th+Lab)
Course Codes	**Course Title**	**Knowledge Area**		
CPT-421	**Supervised Industrial Training (Compulsory)**	Computer Engineering Technology Domain Industrial Training	16	40 (Per Week)
	Subtotal		**0+16= 16**	**0+48= 48**
Total Credit Hours & Contact Hours in Four Years			**82+50 = 132**	**82+150=232**

Web link :