AHMAD HASSAN POLYTECHNIC INSTITUTE

4-Dev Samaj Road, Sant Nagar, Lahore · 0316-4986370 · info@ahpi.edu.pk

SCHEME OF STUDIES

DAE Architecture Technology

First year

Code	Subject	Hours	T	P	C
Gen 111	Islamiat and Pakistan Studies	32	1	0	1
Eng 112	English	64	2	0	2
Math 113	Applied Mathematics-I	96	3	0	3
Phy 122	Applied Physics	128	1	3	2
Ch-112	Applied Chemistry	128	1	3	2
Coms 111	Communication Skills	96	0	3	1
ARCH-112	Introduction to Architecture	128	1	3	2
ARCH-123	Architectural Graphics-I	288	0	9	3
ARCH-133	Building Material & Construction-I	160	2	3	3
ARCH-143	Computer Aided Drafting & Presentation-I	224	1	6	3
Total	**—**	**1344**	**12**	**30**	**22**

Second year

Code	Subject	Hours	T	P	C
GEN-211	Islamiat and Pakistan Studies	32	1	0	1
MATH-212	Applied Mathematics-II	64	2	0	2
ARCH-212	Environmental Studies-I	64	2	0	2
ARCH-223	Structural Mechanics & R.C.C Design	160	2	3	3
ARCH-233	Architectural Drawing & Design-I	288	0	9	3
ARCH-242	Computer Aided Drafting and Presentation II	192	0	6	2
ARCH-253	Building Materials and Construction-II	160	2	3	3
ARCH-262	History of Architecture	64	2	0	2
ARCH-274	Surveying and Levelling	256	2	6	4
Total	**—**	**1280**	**13**	**27**	**22**

Third year

Code	Subject	Hours	T	P	C
Gen 311	Islamiat / Pakistan Studies	32	1	0	1
ARCH 312	Environmental Studies II	64	2	0	2
ARCH 324	Architectural Drawing & Design II	384	0	12	4
ARCH 332	Model Making	192	0	6	2
ARCH 343	Specification & Estimation	160	2	3	3
ARCH 353	Building Materials & Construction-III	160	2	3	3
ARCH 362	Construction Management & Safety Practices	64	2	0	2
ARCH 372	Computer Aided Drafting & Presentation III	192	0	6	2
Total	**—**	**1248**	**9**	**30**	**19**

DAE Civil Technology

First year

Code	Subject	T	P	C	Hours
Gen 111	Islamiat & Pakistan Studies	1	0	1	32
TTQ 111	Tarjuma-Tul-Quran	1	0	1	32
Eng 112	English	2	0	2	64
Math 113	Applied Mathematics-I	3	0	3	96
Ch 112	Applied Chemistry	1	3	2	128
Phy 122	Applied Physics	1	3	2	128
Civil 124	Civil Engineering Surveying-I	2	6	4	256
Civil 153	Civil Engineering Materials & Building Construction	2	3	3	160
Civil 103	Civil Engineering Drawing-I	1	6	3	224
Shop 131	Engineering Workshop Practice	0	3	1	96
Comp 121	Computer Applications	0	3	1	96
Total	—	**14**	**27**	**23**	**1312**

Second year

Code	Subject	T	P	C	Hours
Gen 201	Islamiat & Pakistan Studies	1	0	1	32
TTQ 211	Tarjuma-Tul-Quran	1	0	1	32
Math 212	Applied Mathematics-II	2	0	2	64
Gen 221	Communication Skills & Report Writing	1	0	1	32
Civil 203	Public Health Technology	2	3	3	160
Civil 204	Civil Engineering Surveying-II	2	6	4	256
Civil 273	Construction Techniques	2	3	3	160
Civil 283	Quantity Surveying	2	3	3	160
Civil 292	Civil Engineering Drawing-II	0	6	2	192
Civil 263	Engineering Mechanics	2	3	3	160
Civil 212	Health Safety & Environment	2	0	2	64
Total	—	**17**	**24**	**25**	**1312**

Third year

Code	Subject	T	P	C	Hours
Gen 301	Islamiat & Pakistan Studies	1	0	1	32
Civil 313	Advanced Quantity Surveying	1	6	3	224
Civil 304	Construction Project Planning & Management	2	6	4	256
MGM 341	Entrepreneurship	1	0	1	32
Civil 324	Hydraulics & Irrigation Engineering	3	3	4	192
Civil 353	Transportation Engineering	2	3	3	160
Civil 363	Concrete Technology and RCC Design	2	3	3	160
Civil 373	Soil Mechanics & Bridge Engineering	2	3	3	160
Civil 382	Civil Engineering Project	0	6	2	192
Total	—	**14**	**30**	**24**	**1408**

DAE Electrical Technology

First year

Code	Subject	T	P	C
GEN 111	Islamiat/Pakistan Studies	1	0	1
ENG 112	English	2	0	2
MATH 123	Applied Mathematics-I	3	0	3
CH 132	Applied Chemistry	1	3	2
Comp 162	Computer Applications	1	3	2
ET 125	Principles of Electrical Engineering	3	6	5
ET 131	Basic Electrical Drawing	0	3	1
ET 143	Workshop Practice (Electrical)	1	6	3
ET 153	Workshop Practice (Mechanical: Metal Work, Welding, Machine Shop)	0	9	3
Total	**—**	**12**	**30**	**22**

Second year

Code	Subject	T	P	C
GEN 211	Islamiat & Pakistan Studies	1	0	1
MATH 233	Applied Mathematics-II	3	0	3
PHY 222	Applied Physics	1	3	2
MGM 221	Business Management & Industrial Economics	1	0	1
ET 203	D.C. Machines & Batteries	2	3	3
ET 273	Electrical Instruments & Measurements	2	3	3
ET 253	Utilization of Electrical Energy	2	3	3
ET 252	Electrical Installation Planning & Estimating	1	3	2
ET 261	Applications of Computers in Electrical Tech.	0	3	1
ET 283	Basic Electronics	2	3	3
ET 282	Digital Logic Design	1	3	2
Total	**—**	**16**	**24**	**24**

Third year

Code	Subject	T	P	C
GEN 311	Islamiat/Pakistan Studies	1	0	1
MGM 321	Business Communication	1	0	1
MGM 311	Industrial Management & Human Relations	1	0	1
ET 326	A.C. Machines	4	6	6
ET 332	Power Plant & Energy Conservation	2	0	2
ET 345	Transmission, Distribution and Protection of Power Systems	4	3	5
ET 303	Telecommunication	2	3	3
ET 363	Repair & Maintenance of Electrical Equipment	1	6	3
ET 373	Industrial Electronics	2	3	3
Total	**—**	**18**	**21**	**25**

DAE Electronics Technology

First year

Code	Subject	T	P	C
Gen 111	Islamiat & Pakistan Studies	1	0	1
Eng 112	English	2	0	2
Math 123	Applied Mathematics-I	3	0	3
Phy 122	Applied Physics	1	3	2
Ch 132	Applied Chemistry	1	3	2
Comp 112	Computer Fundamentals	1	3	2
ELTR 114	Electrical Circuits	3	3	4
ELTR 123	Electronics Devices (Rev.)	2	3	3
ELTR 132	Engineering Drawing & Computer Aided Design	0	6	2
ELTR 141	Electrical Wiring (Rev.)	0	3	1
Total	**—**	**14**	**24**	**22**

Second year

Code	Subject	T	P	C
Gen 211	Islamiat & Pak Studies	1	0	1
Math 233	Applied Mathematics-II	3	0	3
Coms 211	Communication Skills	1	0	1
ELTR 212	Propagation of Electromagnetic Waves (Rev.)	2	0	2
ELTR 225	Analog Electronics	3	6	5
ELTR 233	Electrical Instruments & Measurements (Rev.)	2	3	3
ELTR 243	Electrical Machines (Rev.)	2	3	3
ELTR 253	Communication Systems	2	3	3
ELTR 264	Digital Electronics	3	3	4
ELTR 271	PCB Fabrication	0	3	1
Total	**—**	**19**	**21**	**26**

Third year

Code	Subject	T	P	C
Gen 311	Islamiat & Pak Studies	1	0	1
Mgm 311	Industrial Management & Human Relations	1	0	1
OSHE 311	Occupational Safety, Health and Environment	1	0	1
El.TR 303	Equipment Maintenance & Servicing	1	6	3
El.TR 314	Computer Architecture	3	3	4
El.TR 332	Project	0	6	2
El.TR 343	Industrial Electronics	2	3	3
El.TR 353	Power Electronics	2	3	3
El.TR 363	Microcontroller Programming and Applications	2	3	3
Total	**—**	**13**	**24**	**21**

Diploma in Information Technology

Part-I (first year)

#	Subject	Theory/wk	Practical/ wk	Theory marks	Practical marks	Total
1	ICT	3	3	75	25	100
2	Introduction to MS-Office	3	3	75	25	100
3	Computer Networks	3	3	75	25	100
4	Operating System	3	3	75	25	100
5	Introduction to Programming	3	3	75	25	100
6	Library Activities	0	2	0	0	0
	Total	**15**	**17**	**375**	**125**	**500**

Part-II (first year)

#	Subject	Theory/wk	Practical/ wk	Theory marks	Practical marks	Total
1	Data Base System	3	3	75	25	100
2	Video Editing	3	3	75	25	100
3	Web Development Essential	3	3	75	25	100
4	Graphics Design	3	3	75	25	100
5	Project	0	6	0	100	100
6	Library Activities	0	2	0	0	0
	Total	**12**	**20**	**300**	**200**	**500**

Part-III (second year)

#	Subject	Theory/wk	Practical/ wk	Theory marks	Practical marks	Total
1	English-I	6	0	100	0	100
2	Urdu-I	6	0	100	0	100
3	Islamiat / Religious Education *	3	0	50	0	50
4	Mutalea Quran-e-Hakeem **	3	0	50	0	50
5	Elective subjects (any one combination of 3) ***	12	0	200	0	200
6	Library Activities	0	2	0	0	0
	Total	**30**	**2**	**500**	**0**	**500**

Part-IV (second year)

#	Subject	Theory/wk	Practical/ wk	Theory marks	Practical marks	Total
1	English-II	6	0	100	0	100
2	Urdu-II	6	0	100	0	100
3	Pak-Study	3	0	50	0	50
4	Mutalae Quran-e-Hakeem *	3	0	50	0	50
5	Elective subjects (any one combination of 3) **	12	0	200	0	200
6	Library Activities	0	2	0	0	0
	Total	**30**	**2**	**500**	**0**	**500**

* Islamiat / Islamic Education / Religious Education / Ethics (for non-Muslims)
** Mutalae Quran-e-Hakeem / Translation of the Holy Quran / Ethics or Civics (for non-Muslims)
*** Computer Science subjects are studied in the first year (Part-I & Part-II)
Elective combinations: Mathematics, Economics, Computer Science · Mathematics, Statistics, Computer Science · Mathematics, Physics, Computer Science

T = theory, P = practical, C = credits.