

STRUCTURE OF THE SYLLABUS FOR 4 YEAR UG PROGRAMME

ROYAL SCHOOL OF INFORMATION TECHNOLOGY

BCA (Honours/Honours with Research)

1st Semester			
Sl. No.	Subject Code	Names of subjects	Credit
Major			
1	CAP052M101	Discrete Structures	3
2	CAP052M102	Introduction to C Programming	3
Minor			
3	CAP052N101	Fundamentals of Web Design	3
Interdisciplinary			
4	IKS992K101	Introduction to Indian Knowledge System-I	3
Ability Enhancement Courses (AEC)			
5	CEN982A101	Communicative English	
	BHS982A102	Behavioural Science-I	2
Skill Enhancement Courses (SEC)			
6	CAP052S101	Windows Programming using C#	3
Value Addition Courses (VAC)			
7	VAC-1	Basket Course	3
MOOCS			
8	MOOCS	One 8-week Course from SWAYAM /MOOCS as per the direction of the Department	2
		TOTAL	22
2nd Semester			
Sl. No.	Subject Code	Names of subjects	Credit
Discipline Specific Major (Major)			
1	CAP052M201	Data Structures	3
2	CAP052M202	Computer Architecture	3

Minor			
3	CAP052N201	Server-Side Programming	3
Interdisciplinary			
4	IKS992K201	Indian Knowledge System II	3
Ability Enhancement Courses (AEC)			
5	CEN982A101	Communicative English	1
	BHS982A102	Behavioural Science-II	1
Skill Enhancement Courses (SEC)			
6	CAP052S201	Computer Hardware and Networking	3
Value Addition Courses (VAC)			
7	VAC992V2409	Basket Course (Cybersecurity – RSIT-List Offered by the University)	3
8	MOOCS	One 8-week Course from SWAYAM /MOOCS as per the direction of the Department	2
		TOTAL	22
3 rd Semester			
Sl. No.	Subject Code	Names of subjects	Credit
Major			
1	CAP052M301	Java Programming	4
2	CAP052M302	Database Management Systems	4
Minor			
3	CAP052N301	Front-End Development with React (Offered to Others)	4
Interdisciplinary			
4	CAP052I301	Introduction to Python (Offered to all by RSIT-IDC, Practical 3hours)	3
Ability Enhancement Courses (AEC)			
5	CEN982A301	Communicative English III: Fundamentals of Business Communication	1+1
	BHS982A302	Behavioural Science III	
Skill Enhancement Courses (SEC)			

6	CAP052S301	SEC-3 (System Administration)	3
MOOCS			
7	MOOCS	One 8-week Course from SWAYAM /MOOCS as per the direction of the Department	2
		TOTAL	22
4th Semester			
Sl. No.	Subject Code	Names of subjects	Credit
Major			
1	CAP052M401	Operating Systems	4
2	CAP052M402	Data Communication Networks	4
3	IKS052K403	Indian Knowledge System (Related to Computer Science offered by IKS)	4
Minor			
4	CAP052N401	Front End Development with Angular	3
5	CAP052N402	Server-Side Programming with Node JS	3
Ability Enhancement Courses (AEC)			
	CEN982A401	Communicative English	1
6	BHS982A402	Behavioural Science-IV	1
MOOCS			
7	MOOCS	One 8-week Course from SWAYAM /MOOCS as per the direction of the Department	2
		TOTAL	22

5th Semester			
Sl. No.	Subject Code	Names of subjects	Credit
Major			
1	CAP052M501	Web Technology	4

2	CAP052M502	Python Programming	4
3	CAP052M503/ CAP052M504	Foundation of Artificial Intelligence/ Statistical Computing	4
Minor			
4	CAP052N501	Web Integration and Application	4
MOOCS			
5	MOOCS	One 8-Week Course from SWAYAM /MOOCS as per the direction of the Department	2
Internship			
6	CAP052I501	Summer Internship	4
		TOTAL	22
6th Semester			
Sl. No.	Subject Code	Names of subjects	Credit
Major			
1	CAP052M601	Software Engineering	4
2	CAP052M602	Cryptography and Network Security	4
3	CAP052M603/ CAP052M604	Introduction to Machine learning /Introduction to Data science	4
4	CAP052M605/ CAP052M606	Introduction to Deep Learning /Introduction to Big Data Analytics	4
Minor			
5	CAP052N601	Secure Web Development	4
MOOCS			
6	MOOCS	One 8-Week Course from SWAYAM /MOOCS as per the direction of the Department	2
		TOTAL	22

7th Semester			
Sl. No.	Subject Code	Names of subjects	Credit
Major			

1	CAP052M701	Cloud Computing	3
2	CAP052M702	Introduction to Data Warehousing	3
3	CAP052M703	Introduction to Natural Language Processing	3
4	CAP052M704	Wireless Communication Network	3
5	CAP052M711	Cloud Computing Lab	1
6	CAP052M712	Introduction to Data Warehousing Lab	1
7	CAP052M713	Introduction to Natural Language Processing Lab	1
8	CAP052M714	Wireless Communication Network Lab	1
Minor			
5	CAP052N701	Cloud-Based Web Development	4
MOOCS			
6	MOOCS	One 8-week Course from SWAYAM /MOOCS as per the direction of the Department	2
		TOTAL	22
8th Semester			
Sl. No.	Subject Code	Names of subjects	Credit
Major			
1	CAP052M801	Soft Computing	3
2	CAP052M811	Soft Computing Lab	1
Minor			
2	CAP052N801	Web Page Ranking and Optimization	4
MOOCS			
3	MOOCS	One 8-week Course from SWAYAM /MOOCS as per the direction of the Department	2
Dissertation			
4		Dissertation	12
Advanced Level Core Course instead of Dissertation			
5	CAP052M802	Soft Computing	4
6	CAP052M803	Blockchain Technologies	4
7	CAP052M804	Quantum Computing	4
		Total	22

