

Jawaharlal Nehru Architecture and Fine Arts University

Course Structure for B.Tech. (FSP)

(Under the CBCS, Effective from the Academic Year 2017-2018)

1st Semester

S. No	Course Code	Course Title	Pr e - re qu isit es	Periods/ Hours per week				Cr edi ts	Marks			En d Ex am	R e m a r k s *
				L	S	P /T / O	To tal		Int.	Ext.	Total		
1	FS17B1.1C	Building Services Studio-I	-	2	6	-	8	8	100	100	200	J	
2	FS17B1.2C	Graphics & Presentation Techniques	-	4	-	-	4	4	50	50	100	J	
3	FS17B1.3C	Engineering Physics	-	3	-	-	3	3	50	50	100	W	
4	FS17B1.4C	Engineering Chemistry	-	3	-	-	3	3	50	50	100	W	
5	FS17B1.5C	Surveying and Leveling	-	2	-	2	4	4	50	50	100	W	
6	FS17B1.6C	Computer Applications in FSP	-	-	-	2	2	2	50	50	100	P	
7	BT17B1.1C	Engineering Mathematics	-	4	-	-	4	4	50	50	100	W	
8	GN17B1.2A	Environment Studies	-	2	-	-	2	2	50	50	100	W	
							30	30	400	400	800		

* Note: W- Written, P- Practical, J-Jury (all Practical and Jury end semester exams for Facilities Services will be followed by Viva- Voce)

*Note: L-Lecture, S-Studio, P-Practical, T-Tutorial, O-Others, F-Fieldwork.

2nd Semester

S.No	Course Code	Course Title	Prerequisites	Periods/ Hours per week				Credits	Marks			End Exam	Remarks*
				L	S	P/T/O	Total		Int.	Ext.	Total		
1	FS17B2.1C	Building Services Studio-II	-	2	8	-	10	10	100	100	200	J	
2	FS17B2.2C	Structural Mechanics	-	3	-	-	3	3	50	50	100	W	
3	FS17B2.3C	Fluid Mechanics & Hydraulics	FS 17 B1 .3 C BT 17 B1 .1 C	3	-	-	3	3	50	50	100	W	Open
4	FS17B2.4C	Building Materials	-	3	-	-	3	3	50	50	100	W	
5	FS17B2.5C	Basics of Electrical Engineering	-	3	-	-	3	3	50	50	100	W	
6	BT17B2.1C	Mathematical Methods	-	4	-	-	4	4	50	50	100	W	
7	GN17B2.1A	Communication Skills	-	2	-	-	2	2	50	50	100	P	Open
8	GN17B2.2A	Value Education	-	2	-	-	2	2	50	-	50	-	
							30	30	400	350	850		

* Note: W- Written, P- Practical, J-Jury (all Practical and Jury end semester exams for Facilities Services will be followed by Viva- Voce)

*Note: L-Lecture, S-Studio, P-Practical, T-Tutorial, O-Others, F-Fieldwork.

3rd Semester

S.No.	Course Code	Course Title	Prerequisites	Periods/Hours per week				Credits	Marks			End Exam	Remarks
				L	S	P / T / O	Total		Int.	Ext.	Total		
1	FS17B3.1C	Building Services Studio-III	-	2	8	-	10	10	100	100	200	J	
2	FS17B3.2C	Electrical Systems FS17B2.5C		3	-	-	3	3	50	50	100	W	
3	FS17B3.3C	Fundamentals of Structural systems	-	3	-	-	4	4	50	50	100	W	
4	FS17B3.4C	Thermodynamics FS17B1.3C BT17B1.1C FS17B1.4C		4	-	-	4	4	50	50	100	W	Open
5	FS17B3.5C	Water Supply Systems	-	3	-	-	3	3	50	50	100	W	Open
6	FS17B3.6C	Waste Water Systems	-	3	-	-	3	3	50	50	100	W	Open
7	FS17B3.xE	Elective - I	-	-	-	-	-	3	50	50	100	W / J / P **	
							27	30	400	400	800		

****Note:** End Exam shall be Written (or) Practical depending on the Chosen Elective.

* Note: W- Written, P- Practical, J-Jury (all Practical and Jury end semester exams for Facilities Services will be followed by Viva- Voce)

*Note: L-Lecture, S-Studio, P-Practical, T-Tutorial, O-Others, F-Fieldwork.

7	DT17B1.4C	C Programming and Data Structures	-	-	-	3	-	3	50	50	100	P	Open
	FS17B3.2E	Construction Workshop	-	-	-	3	-	3	50	50	100	P	Open
	FS17B3.3E	Renewable Energy Systems	-	3	-	-	-	3	50	50	100	W	Open

4th Semester

S.No.	Course Code	Course Title	Prerequisites	Periods/Hours per week				Credits	Marks			End Exam	Remarks*
				L	S	P/T/O	Total		Int.	Ext	Total		
1	FS17B4.1C	Building Services Studio-IV	-	2	8	-	10	10	100	100	200	J	
2	FS17B4.2C	Building Technology-I	-	3	-	-	3	3	50	50	100	W	
3	FS17B4.3C	Refrigeration Systems FS17B3.4C		4	-	-	4	4	50	50	100	W	
4	FS17B4.4C	Illumination Engineering	-	3	-	-	3	3	50	50	100	W	Open
5	FS17B4.5C	Climatology and Built Environment	-	3	-	-	3	3	50	50	100	W	Open
6	FS17B4.6C	CAD And 3D Modeling	-	-	-	4	4	4	50	50	100	P	Open
7		Open Elective-I	-	-	-	-	-	3	50	50	100	*	
							27	30	350	450	800		

**Note: End Exam shall be Written (or) Practical depending on the Open Elective.

* Note : Open elective : 4P/WK and 3 Credits are assumed for open Elective of total semester-wise periods and credits

* Note: W- Written, P- Practical, J-Jury (all Practical and Jury end semester exams for Facilities Services will be followed by Viva- Voce)

*Note: L-Lecture, S-Studio, P-Practical, T-Tutorial, O-Others, F-Fieldwork.

5th Semester

S.No.	Course Code	Course Title	Pre-requisites	Periods/ Hours per week				Credits	Marks			End Exam W/J/P	Remarks
				L	S	P/T/O	Total		Int.	Ext.	Total		
1	FS17B5.1C	Building Services Studio-V	-	2	8	-	10	10	100	100	200	J	
2	FS17B5.2C	HVAC Systems FS17B2.3C FS17B3.4C FS17B4.3C		4	-	-	4	4	50	50	100	W	
3	FS17B5.3C	Building Technology-II FS17B4.3C		3	-	-	3	3	50	50	100	W	
4	FS17B5.4C	Fire Engineering and Science	-	3	-	-	3	3	50	50	100	W	Open
5	FS17B5.5C	Building Information Modeling	-	3	-	-	3	3	50	50	100	P*	Open
6	FS17B5.6C	Building Automations and Controls	-	4	-	-	4	4	50	50	100	W	
7	FS17B5.xE	Elective-II	-	-	-	-	-	3	50	50	100	W/P***	
							27	30	400	400	800		
<p>***Note: End Exam shall be Written (or) Practical depending on the Chosen Elective. * Note: W- Written, P- Practical, J-Jury (all Practical and Jury end semester exams for Facilities Services will be followed by Viva- Voce) *Note: L-Lecture, S-Studio, P-Practical, T-Tutorial, O-Others, F-Fieldwork.</p>													
7	FS17B5.1E	Electrical Energy System and Management	-	3	-	-	3	3	50	50	100	W	
	FS17B5.2E	Energy Auditing	-	3	-	-	3	3	50	50	100	W	Open

*Note: Open to 5th semester Architecture & above.

6th Semester

S.No.	Course Code	Course Title	P r e r e q u i s i t e s	Periods/ Hours per week				Cr e d i t s	Marks			E n d E x a m *	R e m a r k s *
				L	S	P / T / O	To t a l		Int.	Ext.	Total		
1	FS17B6.1C	Building Services Studio-VI	-	2	8	2	12	12	100	100	200	J	
2	FS17B6.2C	Green Building	-	3	-	-	3	3	50	50	100	W	O p e n
3	FS17B6.3C	O & M of Building Services	-	4	-	-	4	4	50	50	100	W	O p e n
4	FS17B6.4C	Estimation, Costing and Specification	-	4	-	-	4	4	50	50	100	W	O p e n
5	FS17B6.5C	Safety Health & Environment	-	4	-	-	4	4	50	50	100	W	O p e n
6	FS17B6.6C	Internship-1*	-	-	-	-	-	-	-	-	-	J	
7	FS17B6.xE	Elective-III	-	-	-	-	-	3	50	50	100	W / P ** *	
							27	30	350	350	700		
<p>*** Note: End Exam shall be Written (or) Practical depending on the Chosen Elective.</p> <p>* Internship-I shall be undertaken during summer vacation for work experience for a period of not less than 4 weeks.</p> <p>* Note: W- Written, P- Practical, J-Jury (all Practical and Jury end semester exams for Facilities Services will be followed by Viva- Voce)</p> <p>*Note: L-Lecture, S-Studio, P-Practical, T-Tutorial, O-Others, F-Fieldwork.</p>													
7	FS17B6.1E	Computer Applications in MEP	-	-	-	3	3	3	50	50	100	P	
	FS17B6.2E	Advanced HVAC Systems	FS17B2.3C FS17B3.4C FS17B4.3C FS17B5.2C	3	-	-	3	3	50	50	100	P	

7th Semester

S.No.	Course Code	Course Title	Pre-requisites	Periods/ Hours per week				Credits	Marks			End Exam	Remarks*
				L	S	P/T/O	Total		Int.	Ext.	Total		
1	FS17B7.1C	Building Services Studio-VII	-	2	8	-	10	10	100	100	200	J	
2	FS17B7.2C	Mechanical Circulation Systems	-	4	-	-	4	4	50	50	100	W	Open
3	FS17B7.3C	Contract, Tender and Procurement Management	-	4	-	-	4	4	50	50	100	W	
4	FS17B7.4C	Pre-Thesis Seminar	-	2	-	-	2	2	-	-	-	J	
5	FS17B7.5C	Project Management	-	4	-	-	4	4	50	50	100	W	Open
6	FS17B7.xE	Elective-IV	-	-	-	-	3	3	50	50	100	W/P***	
7		Open elective - II	-	-	-	-	-	3	50	50	100	*	
							27	30	350	350	700		
<p>***Note: End Exam shall be Written (or) Practical depending on the Chosen Elective. * Note : Open elective : 4P/WK and 3 Credits are assumed for open Elective for totaling semester wise periods/wk and credits * Note: W- Written, P- Practical, J-Jury (all Practical and Jury end semester exams for Facilities Services will be followed by Viva- Voce) *Note: L-Lecture, S-Studio, P-Practical, T-Tutorial, O-Others, F-Fieldwork.</p>													
6	FS17B7.1E	Workshop MEP	-	-	-	3	3	3	50	50	100	P	
	FS17B7.2E	Building Simulations and Modeling	-	-	-	3	3	3	50	50	100	P	
	FS17B7.3E	Disaster Management in FSP	-	3	-	-	3	3	50	50	100	W	Open

8th Semester

S.No.	Course Code	Course Title	Pre-requisites	Periods/ Hours per week				Credits	Marks	End Exam*	Remarks*		
				L	S	P/T/O	Total					Int.	Ext.
1	FS17B8.1C	Project	FS17 B7.4C	-	-	-	-	12	200	200	400	J	
2	FS17B8.2C	Internship-II**	-	-	-	-	-	8	-	100	100	J	
3	FS17B8.3C	Human Behavior in Buildings	-	4	-	-	4	4	50	50	100	W	Open
4	FS17B8.4C	Grand Viva	-	-	-	-	-	-	-	-	-	J	
5	FS17B8.xE	Elective-V	-	-	-	-	-	3	50	50	100	W	/P***
6		Open elective - III	-	-	-	-	-	3	50	50	100	*	
							4	30	350	450	800		
5	FS17B8.1E	Energy Simulation and Modeling	FS17 B7.2E	-	-	3	3	3	50	50	100	P	Open
	FS17B8.2E	Project Finance	FS17 B7.5C	3	-	-	3	3	50	50	100	W	

**As per Academic Calendar including Summer Vacation Internship for a period of 10 weeks, End Examination shall be Practical with Viva-Voce
 *** Note: End Exam shall be Written (or) Practical depending on the Chosen Elective.
 *Note : Open elective : 4P/WK and 3 Credits are assumed of open Elective for totaling semester wise periods and credits
 * Note: W- Written, P- Practical, J-Jury (all Practical and Jury end semester exams for Facilities Services will be followed by Viva- Voce)
 *Note: L-Lecture, S-Studio, P-Practical, T-Tutorial, O-Others, F-Fieldwork.