

Annexure – IV*

- (i) Following is the list of B.Tech. courses wherein the main papers (Hons.) and the specified Basic/ Allied Engineering Science papers, which can be offered to students have been compiled.

1. COMPUTER SCIENCE (B.Tech.)

Course	Semester	Main Subject Paper	Basic/Allied Engineering Science#
B.Sc. (H) Computer Science	V	Probability Theory and Statistical Computing	Course to be designed and approved.
		Theory of Computation	
		Computer Graphics	
	VI	Microprocessor	Strategic Human Resource Management (Course to be designed and approved)
		Systems Programming and Compiler Design	
		Network Programming	
	VII	Artificial Intelligence	Course to be designed and approved.
		Information Security	
		Project	
	VIII	Course to be designed and approved.	Course to be designed and approved.
		Course to be designed and approved.	
		Project	

2. ELECTRONICS (B.Tech.)

Course	Semester	Main Subject Paper	Basic/Allied Engineering Science#
B.Tech. Electronics	V	Microprocessors	Numerical Methods (Course to be designed and approved)
		Electromagnetic Waves & Transmission Lines	
		Communication Electronics	
	VI	Embedded Systems	Computer Networks (Course to be designed and approved)
		Control Systems	
		Engineering Mathematics-II	
	VII	Semiconductor Fabrication & Characterization	Course to be designed and approved.

		Photonics	
		Project	
	VIII	Electrical Technology	Course to be designed and approved.
		Modern Communication System	
		Project and Dissertation	

3. FOOD TECHNOLOGY (B.Tech.)

Course	Semester	Main Subject Paper	Basic/Allied Engineering Science#
B.Tech. Food Technology	V	Differential Equations	Thermal Physics (Course to be designed and approved)
		Advanced Food Chemistry	
		Food Microbiology	
	VI	Food Engineering	Probability and Statistical Methods (Course to be designed and approved)
		Food Safety and Regulations	
		Analytical Instrumentation	
	VII	Food Quality Management	Course to be designed and approved.
		Food Packaging Technology	
		Industrial/Research Project	
	VIII	Food Plant Sanitation and Waste Management	Course to be designed and approved.
		Nutraceuticals and Functional Foods	
		Industrial/Research Project	

4. INSTRUMENTATION (B.Tech.)

Course	Semester	Main Subject Paper	Basic/Allied Engineering Science#
B.Tech. Instrumentation	V	Control Systems	Numerical Methods (Course to be designed and approved)
		Analytical Instrumentation	
		Biomedical Instrumentation	
	VI	Virtual Instrumentation	Signals & Systems (Course to be designed and approved)
		System Design using Microprocessor	
		Advanced Biomedical Instrumentation	

	VII	Advanced Instrumental Methods of Analysis	Programming in C and Data Structures (Course to be designed and approved)
		Process Control Dynamics	
		Project	
	VIII	Artificial Intelligence Control Techniques	Networks and Internet/Technology/Communication (Course to be designed and approved)
		8051 & Advanced Microcontrollers	
		Project and Dissertation	

5. POLYMER SCIENCE (B.Tech.)

Course	Semester	Main Subject Paper	Basic/Allied Engineering Science#
B.Tech. Polymer Science	V	Polymer Degradation	Chemical Bonding
		Fiber Science and Rubber Technology	
		Polymers in Packaging Technology	
	VI	Tyre Technology	Engineering Graphics and Drawing (Course to be designed and approved)
		Recycling & Waste Management	
		Conducting Polymers	
	VII	Fiber Manufacturing Technology	Basic Electronics (Course to be designed and approved)
		Speciality Polymers	
		Project	
	VIII	Applied Polymer Science	Computer Programming and Fundamentals (Course to be designed and approved)
		Polymeric Nanomaterial	
		Project	

To be notified later.

***Disclaimer: Subject to Academic Council and Executive Council Minutes (dated 19th July 2014), C/o Council Branch, University of Delhi.**