



**BIKANER TECHNICAL UNIVERSITY, BIKANER**  
**बीकानेर तकनीकी विश्वविद्यालय, बीकानेर**  
(Aligning with 21<sup>st</sup> Century: The Century of Consciousness)  
**OFFICE OF DEAN ACADEMICS**



Ref: F(17)/Acad.I/BoS/Circular/2024-25/1877

Date: 30/09/2024

**CIRCULAR**

The Director/ Principal,  
All The Constituent and Affiliated  
Colleges/Institutions, of BTU, Bikaner

Subject: Matrix mapping the list of University Elective Subjects for B. Tech. VII Semester.

Dear Sir/Madam


As you aware that B. Tech. students have to opt some university elective paper to study from the prescribed list provided by the university under some rules in the VII Semester.

Therefore, we are informing to all the concerned that a matrix mapping the list of University elective subject/papers for B. Tech. branch eligible to opt respective subject/paper as the University elective. The said list is enclosed herewith to remove all type of ambiguities and to reduce the mistake generally made by the students.

Kindly give it the wide publicity amongst the B. Tech. VII Semester students of your Institute/College.

Thanks and Regards

1878-1881

  
30/9/24  
(Dr. Yadunath Singh)  
Dean Academics, BTU

Copy to: -

1. PS to Hon'ble Vice Chancellor Sir for kind perusal.
2. Controller of Examination, BTU for further process.
3. Registrar, BTU
4. Web Administrator to upload on University Website
5. Guard File

  
30/9/24  
Associate Dean Academics, BTU

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# Bikaner Technical University

Matrix mapping the list of University Elective subjects for B.Tech. VII Sem and B.Tech. Branch eligible to opt respective subject as the University elective  
B.Tech. Branch/Specialization

Subject code	List of University Electives	Civil Engineering	Information Technology	Computer Science Engineering	Computer Science Engineering (AI)	Artificial Intelligence & Machine Learning	Artificial Intelligence	Machine Learning & Computing	Computer Science Engineering - (AIML)	Computer Science Engineering	Internet of Things	Computer Science Engineering (Cyber Security)	Artificial Intelligence & Data science	VLSI- Design and Technology	Electronics & Comm. Engineering	Ceramics Engineering & Technology	Aeronautical Engineering	Mechanical Engineering	Electrical & Electronics Engineering	Electrical Engineering	Electronics Instrumentation and Control Engineering	Mining Engineering	Smart Agritech	
7CE6-60.1	Disaster management	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
7CE6-60.2	Waste management	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	
7CE6-60.3	Sustainable transportation systems	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
7CS6-60.1	Computer Networks	Yes	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
7CS6-60.2	Database Management Systems	Yes	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7CS6-60.3	Operating Systems	Yes	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7CS6-60.4	Introduction to Python Programming	Yes	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7CS6-60.5	Linux and Shell Programming	Yes	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7EE6-60.1	Generation of Electrical Power	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	Yes	Yes	Yes
7AE6-60.1	Basics of Aeronautical Engineering	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
7AE6-60.2	Aircraft Maintenance Management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7AE6-60.3	Simulation Modelling and Analysis	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7ME6-60.1	Finite Element Method	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes
7ME6-60.2	Fundamentals of Automotive Systems	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7ME6-60.3	Numerical Methods for Engineers	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
7MX6-60.1	Digital System Design	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes

Subject code	List of University Electives	B.Tech. Branch/Specialization																								
		Civil Engineering	Information Technology	Computer Science Engineering	Computer Science Engineering (AI)	Artificial Intelligence & Machine Learning	Artificial Intelligence	Computer Science Engineering (Data Science)	Data science	Machine Learning & Computing	Computer Science Engineering - (AIML)	Computer Science Engineering	Internet of Things	Computer Science Engineering (Cyber Security)	Artificial Intelligence & Data science	VLSI- Design and Technology	Electronics & Comm. Engineering	Ceramics Engineering & Technology	Aeronautical Engineering	Mechanical Engineering	Electrical & Electronics Engineering	Electrical Engineering	Electronics Instrumentation and Control Engineering	Mining Engineering	Mechatronics	Smart Agritech
7MX6-60.2	Electronics Devices and Applications	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	No	No	Yes	No	Yes
7MX6-60.3	Basics of Sensors technology	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No	No	No	Yes	No	Yes
7MI6-60.1	Tunnel Engineering	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
7MI6-60.2	Rock Engineering	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
7MI6-60.3	Remote Sensing and GIS	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No
7MI6-60.4	Maintenance Management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
7MI6-60.5	Quality and Reliability Engineering	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
7SA6-60.1	Waste to Energy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
7CR6-60.1	Introduction to Metallurgical Processes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
7CR6-60.2	Refractory for Steel Making	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7CR6-60.3	Plant, Equipment and Furnace Design	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

*Signature*  
 Deputy Academic Officer  
 Vishwanath Technical University  
 Ballari