



**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**

**Branch- Automobile Engineering/ Mechanical Engineering (Automobile)**

**V<sup>th</sup> –Semester**

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Electrical & Hybrid Vehicle Technology	3	0	0	6	3	100	40	30	70	
02		Entrepreneurship Development and Startups	2	0	0		2	100	40	30	70	
03		<b>PROFESSIONAL ELECTIVE (ANY ONE)</b> 1. Advances in Automotive Technology 2. Automation & Robotics 3. Transport Management & MV Act 4. Construction & Earth Moving Equipment 5. Automobile Body Engineering & Safety 6. Automobile Electronics 7. Farm Tractor & Special Type of Vehicle	3	0	0		3	100	40	30	70	
		<b>OPEN ELECTIVE (ANY ONE)</b> 1. AI & ML 2. Cloud Computing & Cyber Security 3. IOT 4. Block Chain Technology 5. Drone Technology & Robotics 6. Data Analytics										
04			3	0	0		3	100	40	30	70	
<b>Total</b>			<b>11</b>	<b>0</b>	<b>0</b>		<b>11</b>	<b>400</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Practical</b>			<b>L</b>	<b>T</b>	<b>P</b>		<b>Cr</b>	<b>FM</b>	<b>Overall Pass Marks</b>	<b>Internal</b>	<b>External</b>	<b>Categorization</b>
05		<b>ADVANCE LAB-I</b> (Vehicle Diagnostic Lab)	0	0	3		1.5	50	25	30	20	
06		<b>ADVANCE LAB-II</b> (Fuel, Lubricant & IC Engine Testing Lab)	0	0	3	1.5	50	25	30	20		
07		Entrepreneurship Development and Startups Lab	0	0	2	1	50	25	30	20		
08		Seminar And Report Writing (On UN SUSTAINABLE DEVELOPMENT GOALS)	0	0	2	1	50	25	30	20		
<b>Total</b>			<b>0</b>	<b>0</b>	<b>10</b>	<b>5</b>	<b>200</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	

Audit Course			L	T	P	Cr	FM	Overall Pass Marks	Internal	External	Categorization	
09		<b>FOREIGN LANGUAGE OR REGIONAL LANGUAGE (ANY ONE)</b> <b>FOREIGN LANGUAGE</b> 1. GERMAN 2. JAPANESE 3. CHINESE 4. KOREAN 5. SPANISH 6. RUSSIAN <b>REGIONAL LANGUAGE</b> 7. MARATHI 8. KANNAD 9. TAMIL 10. TELUGU	0			6	0	50	25	30	20	
						<p>Students will complete this Audit Paper of 12 weeks duration from NPTEL/SWAYAM. It is mandatory to pass this paper in order to pass this semester. Student may register on NPTEL/SWAYAM at any time from 1<sup>st</sup> to 5<sup>th</sup> semester but the passing marks and credits will be reflected only in the 5<sup>th</sup> semester.</p> <p>The passing marks and certificate shall be forwarded by the institute to Controller of Examination (CoE), JUT, Ranchi timely.</p>						
10		Sports/NCC/NSS/YOGA/Painting/Music/ Classical Dance	6			0	50	25	30	20		
<b>Internship</b>			L	T	P	Cr	FM	Overall Pass Marks	Internal	External	Categorization	
11		FIELD PROJECTS/ COMMUNITY ENGAGEMENT PROJECTS/ MINI PROJECT	8 weeks			2	--	--	1/0	--		
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>		--	--	--	--	
<b>Grand Total</b>			<b>11</b>	<b>0</b>	<b>10</b>	<b>6</b>	<b>18</b>	<b>750</b>	--	--	--	

\*AU- Audit Course; L: Lecture, T: Tutorial, P: Practice.

J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.

\*Passing in Audit Course shall be mandatory.



**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**

**Branch- Automobile Engineering/ Mechanical Engineering (Automobile)**

**VI<sup>th</sup> –Semester**

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Industrial Internship/ Project	36 Hours per week / week Total 12-16 Weeks			6	12	--	--	--	--	
02		Seminar & Report Writing on IKS (Bhartiya Gyan Prampra)	0	0	4		2	--	--	--	--	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>		--	--	--	--
<b>Grand Total</b>			<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>14</b>	--	--	--	--	--

**L: Lecture, T: Tutorial, P: Practical.**

**J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.**





**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Civil Engineering**

V<sup>th</sup> –Semester

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Transportation Engineering	3	0	0	6	3	100	40	30	70	
02		Entrepreneurship Development and Startups	2	0	0		2	100	40	30	70	
03		<b>PROFESSIONAL ELECTIVE (ANY ONE)</b>	3	0	0		3	100	40	30	70	
		1. Steel Structure 2. Water Resource Engineering 3. Integrated Waste Management 4. Geo Technical Engineering 5. Construction Management & Safety 6. Pre Stressed Concrete										
04		<b>OPEN ELECTIVE (ANY ONE)</b>	3	0	0		3	100	40	30	70	
		1. AI & ML 2. Cloud Computing & Cyber Security 3. IOT 4. Block Chain Technology 5. Drone Technology & Robotics 6. Data Analytics										
<b>Total</b>			<b>11</b>	<b>0</b>	<b>0</b>		<b>11</b>	<b>400</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Practical</b>			<b>L</b>	<b>T</b>	<b>P</b>		<b>Cr</b>	<b>FM</b>	<b>Overall Pass Marks</b>	<b>Internal</b>	<b>External</b>	<b>Categorization</b>
05		<b>ADVANCE LAB-I</b> (Geo-Tech Lab)	0	0	3	1.5	50	25	30	20		
06		<b>ADVANCE LAB-II</b> (Hydraulics & IOT Lab)	0	0	3	1.5	50	25	30	20		
07		Entrepreneurship Development And Startups Lab	0	0	2	1	50	25	30	20		
08		Seminar And Report Writing (On UN SUSTAINABLE DEVELOPMENT GOALS)	0	0	2	1	50	25	30	20		
<b>Total</b>			<b>0</b>	<b>0</b>	<b>10</b>	<b>5</b>	<b>200</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	

Audit Course			L	T	P	Cr	FM	Overall Pass Marks	Internal	External	Categorization
09		<b>FOREIGN LANGUAGE OR REGIONAL LANGUAGE (ANY ONE)</b> <b>FOREIGN LANGUAGE</b> 1. GERMAN 2. JAPANESE 3. CHINESE 4. KOREAN 5. SPANISH 6. RUSSIAN <b>REGIONAL LANGUAG</b> 7. MARATHI 8. KANNAD 9. TAMIL 10. TELUGU	0				100	40	--	100	
							Students will complete this Audit Paper of 12 weeks duration from NPTEL/SWAYAM. It is mandatory to pass this paper in order to pass this semester. Student may register on NPTEL/SWAYAM at any time from 1 <sup>st</sup> to 5 <sup>th</sup> semester but the passing marks and credits will be reflected only in the 5 <sup>th</sup> semester. The passing marks and certificate shall be forwarded by the institute to Controller of Examination (CoE), JUT, Ranchi timely.				
10		Sports/NCC/NSS/YOGA/Painting/Music/ Classical Dance	6			0	50	25	30	20	
<b>Internship</b>			L	T	P	<b>Cr</b>	<b>FM</b>	<b>Overall Pass Marks</b>	<b>Internal</b>	<b>External</b>	<b>Categorization</b>
11		FIELD PROJECTS/ COMMUNITY ENGAGEMENT PROJECTS/ MINI PROJECT	8 weeks			2	--	--	1/0	--	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		--	--	--	--
<b>Grand Total</b>			<b>11</b>	<b>0</b>	<b>10</b>	<b>6</b>	<b>18</b>	<b>750</b>	--	--	--

\*AU- Audit Course; L: Lecture, T: Tutorial, P: Practice.

J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.

\*Passing in Audit Course shall be mandatory.



**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Civil Engineering**

**VI<sup>th</sup> –Semester**

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Industrial Internship/ Project	36 Hours per week / week Total 12-16 Weeks			6	12	--	--	--	--	
02		Seminar & Report Writing on IKS (Bhartiya Gyan Prampra)	0	0	4		2	--	--	--	--	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>		--	--	--	--
<b>Grand Total</b>			<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>14</b>	--	--	--	--	--

**L: Lecture, T: Tutorial, P: Practical.**

**J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.**





**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**

**Branch- Computer Engineering/Computer Science Engineering/Computer Engineering & Application and CS & IT**

**V<sup>th</sup> –Semester**

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Artificial Intelligence and Machine Learning	3	0	0	6	3	100	40	30	70	
02		Entrepreneurship Development And Startups	2	0	0		2	100	40	30	70	
03		<b>PROFESSIONAL ELECTIVE (ANY ONE)</b> 1. Full Stack Development 2. Data Analytics 3. IOT 4. Cyber Security 5. Cloud Computing & Big Data 6. .Net Programming Through C# 7. Block Chain Technology	3	0	0		3	100	40	30	70	
		<b>OPEN ELECTIVE (ANY ONE)</b> 1. Design Thinking 2. Automation & Robotics 3. Organizational Behavior 4. HRM using AI & Data Science 5. Human Values										
04			3	0	0		3	100	40	30	70	
<b>Total</b>			<b>11</b>	<b>0</b>	<b>0</b>		<b>11</b>	<b>400</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Practical</b>			<b>L</b>	<b>T</b>	<b>P</b>		<b>Cr</b>	<b>FM</b>	<b>Overall Pass Marks</b>	<b>Internal</b>	<b>External</b>	<b>Categorization</b>
05		<b>ADVANCE LAB-I</b> (Web Programming using PHP Lab)	0	0	3		1.5	50	25	30	20	
06		<b>ADVANCE LAB-II</b> (AI & Data Analytics Lab)	0	0	3	1.5	50	25	30	20		
07		Entrepreneurship Development And Startups Lab	0	0	2	1	50	25	30	20		
08		Seminar And Report Writing (On UN SUSTAINABLE DEVELOPMENT GOALS)	0	0	2	1	50	25	30	20		
<b>Total</b>			<b>0</b>	<b>0</b>	<b>10</b>	<b>5</b>	<b>200</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	

Audit Course			L	T	P	Cr	FM	Overall Pass Marks	Internal	External	Categorization	
09		<b>FOREIGN LANGUAGE OR REGIONAL LANGUAGE (ANY ONE)</b> <b>FOREIGN LANGUAGE</b> 1. GERMAN 2. JAPANESE 3. CHINESE 4. KOREAN 5. SPANISH 6. RUSSIAN <b>REGIONAL LANGUAG</b> 7. MARATHI 8. KANNAD 9. TAMIL 10. TELUGU	0			6	Students will complete this Audit Paper of 12 weeks duration from NPTEL/SWAYAM. It is mandatory to pass this paper in order to pass this semester. Student may register on NPTEL/SWAYAM at any time from 1 <sup>st</sup> to 5 <sup>th</sup> semester but the passing marks and credits will be reflected only in the 5 <sup>th</sup> semester. The passing marks and certificate shall be forwarded by the institute to Controller of Examination (CoE), JUT, Ranchi timely.					
							0	50	25	30	20	
10		Sports/NCC/NSS/YOGA/Painting/Music/ Classical Dance	6			Student shall participate actively in one of the activities and for Passing of the semester "Participation Certificate" in activity will be mandatory student participation shall be monitored and participation record shall be maintained at institute level. The marks obtained shall be forwarded to controller of Examination (CoE), JUT, Ranchi timely.						
Internship			L	T	P	Cr	FM	Overall Pass Marks	Internal	External	Categorization	
11		Field Projects/ Community Engagement Projects/ Mini Project	8 weeks			2	--	--	1/0	--	--	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		--	--	--	--	
<b>Grand Total</b>			<b>11</b>	<b>0</b>	<b>10</b>	<b>6</b>	<b>21</b>	<b>750</b>	--	--	--	

\*AU- Audit Course; L: Lecture, T: Tutorial, P: Practice.

J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.

\*Passing in Audit Course shall be mandatory.



**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**

**Branch- Computer Engineering/Computer Science Engineering/Computer Engineering & Application and CS & IT**

**VI<sup>th</sup> –Semester**

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Industrial Internship/ Project	36 Hours per week / week Total 12-16 Weeks			6	12	--	--	--	--	
02		Seminar & Report Writing on IKS (Bhartiya Gyan Prampra)	0	0	4		2	--	--	--	--	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>		--	--	--	--
<b>Grand Total</b>			<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>14</b>	--	--	--	--	--

**L: Lecture, T: Tutorial, P: Practical.**

**J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.**





**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Artificial Intelligence & Machine Learning**

V<sup>th</sup> –Semester

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Artificial Intelligence and Machine Learning	3	0	0	6	3	100	40	30	70	
02		Entrepreneurship Development And Startups	2	0	0		2	100	40	30	70	
03		<b>PROFESSIONAL ELECTIVE (ANY ONE)</b> 1. Full Stack Development 2. Data Analytics 3. IOT 4. Cyber Security 5. Cloud Computing & Big Data 6. .Net Programming Through C# 7. Block Chain Technology 8. Natural Language Processing	3	0	0		3	100	40	30	70	
04		<b>OPEN ELECTIVE (ANY ONE)</b> 1. Design Thinking 2. Automation & Robotics 3. Organizational Behavior 4. HRM using AI & Data Science 5. Human Values	3	0	0		3	100	40	30	70	
<b>Total</b>			<b>11</b>	<b>0</b>	<b>0</b>		<b>11</b>	<b>400</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Practical</b>			<b>L</b>	<b>T</b>	<b>P</b>		<b>Cr</b>	<b>FM</b>	<b>Overall Pass Marks</b>	<b>Internal</b>	<b>External</b>	<b>Categorization</b>
05		<b>ADVANCE LAB-I</b> (Web Programming using PHP Lab)	0	0	3	1.5	50	25	30	20		
06		<b>ADVANCE LAB-II</b> (AI & Data Analytics Lab)	0	0	3	1.5	50	25	30	20		
07		Entrepreneurship Development And Startups Lab	0	0	2	1	50	25	30	20		
08		Seminar And Project Report Writing (On UN SUSTAINABLE DEVELOPMENT GOALS)	0	0	2	1	50	25	30	20		
<b>Total</b>			<b>0</b>	<b>0</b>	<b>10</b>	<b>5</b>	<b>200</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	

Audit Course			L	T	P	Cr	FM	Overall Pass Marks	Internal	External	Categorization	
09		<b>FOREIGN LANGUAGE OR REGIONAL LANGUAGE (ANY ONE)</b> <b>FOREIGN LANGUAGE</b> 1. GERMAN 2. JAPANESE 3. CHINESE 4. KOREAN 5. SPANISH 6. RUSSIAN <b>REGIONAL LANGUAG</b> 7. MARATHI 8. KANNAD 9. TAMIL 10. TELUGU	0					100	40	--	100	
								Students will complete this Audit Paper of 12 weeks duration from NPTEL/SWAYAM. It is mandatory to pass this paper in order to pass this semester. Student may register on NPTEL/SWAYAM at any time from 1 <sup>st</sup> to 5 <sup>th</sup> semester but the passing marks and credits will be reflected only in the 5 <sup>th</sup> semester. The passing marks and certificate shall be forwarded by the institute to Controller of Examination (CoE), JUT, Ranchi timely.				
10		Sports/NCC/NSS/YOGA/Painting/Music/ Classical Dance				0	50	25	30	20		
<b>Internship</b>			<b>L</b>	<b>T</b>	<b>P</b>	<b>Cr</b>	<b>FM</b>	<b>Overall Pass Marks</b>	<b>Internal</b>	<b>External</b>	<b>Categorization</b>	
11		Field Projects/ Community Engagement Projects/ Mini Project	8 weeks			2	--	--	1/0	--	--	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		--	--	--	--	
<b>Grand Total</b>			<b>11</b>	<b>0</b>	<b>10</b>	<b>6</b>	<b>18</b>	<b>750</b>	--	--	--	

\*AU- Audit Course; L: Lecture, T: Tutorial, P: Practice.

J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.

\*Passing in Audit Course shall be mandatory.



**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Artificial Intelligence & Machine Learning**

**VI<sup>th</sup> –Semester**

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Industrial Internship/ Project	36 Hours per week / week Total 12-16 Weeks			6	12	--	--	--	--	
02		Seminar & Report Writing on IKS (Bhartiya Gyan Prampra)	0	0	4		2	--	--	--	--	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>		--	--	--	--
<b>Grand Total</b>			<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>14</b>	--	--	--	--	--

**L: Lecture, T: Tutorial, P: Practical.**

**J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.**





**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Cloud Computing & Big Data**

V<sup>th</sup> –Semester

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Cloud Computing & Big Data	3	0	0	6	3	100	40	30	70	
02		Entrepreneurship Development And Startups	2	0	0		2	100	40	30	70	
03		<b>PROFESSIONAL ELECTIVE (ANY ONE)</b> 1. Full Stack Development 2. Data Analytics 3. IOT 4. Cyber Security 5. .Net Programming Through C# 6. Block Chain Technology	3	0	0		3	100	40	30	70	
		<b>OPEN ELECTIVE (ANY ONE)</b> 1. Design Thinking 2. Automation & Robotics 3. Organizational Behavior 4. HRM using AI & Data Science 5. Human Values										
04			3	0	0		3	100	40	30	70	
<b>Total</b>			<b>11</b>	<b>0</b>	<b>0</b>		<b>11</b>	<b>400</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Practical</b>			<b>L</b>	<b>T</b>	<b>P</b>		<b>Cr</b>	<b>FM</b>	<b>Overall Pass Marks</b>	<b>Internal</b>	<b>External</b>	<b>Categorization</b>
05		<b>ADVANCE LAB-I</b> (Cloud Computing using AWS Lab)	0	0	3		1.5	50	25	30	20	
06		<b>ADVANCE LAB-II</b> (AI & Data Analytics Lab)	0	0	3	1.5	50	25	30	20		
07		Entrepreneurship Development And Startups Lab	0	0	2	1	50	25	30	20		
08		Seminar And Report Writing (On UN SUSTAINABLE DEVELOPMENT GOALS)	0	0	2	1	50	25	30	20		
<b>Total</b>			<b>0</b>	<b>0</b>	<b>10</b>	<b>5</b>	<b>200</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	





**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Cloud Computing & Big Data**

**VI<sup>th</sup> –Semester**

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Industrial Internship/ Project	36 Hours per week / week Total 12-16 Weeks			6	12	--	--	--	--	
02		Seminar & Report Writing on IKS (Bhartiya Gyan Prampra)	0	0	4		2	--	--	--	--	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>		--	--	--	--
<b>Grand Total</b>			<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>14</b>	--	--	--	--	--

**L: Lecture, T: Tutorial, P: Practical.**

**J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.**





**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Computer Engineering & IOT**

V<sup>th</sup> –Semester

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Computer Engineering & IOT	3	0	0	6	3	100	40	30	70	
02		Entrepreneurship Development And Startups	2	0	0		2	100	40	30	70	
03		<b>PROFESSIONAL ELECTIVE (ANY ONE)</b> 1. Full Stack Development 2. Data Analytics 3. IOT 4. Cyber Security 5. Cloud Computing & Big Data 6. .Net Programming Through C# 7. Block Chain Technology	3	0	0		3	100	40	30	70	
04		<b>OPEN ELECTIVE (ANY ONE)</b> 1. Design Thinking 2. Automation & Robotics 3. Organizational Behavior 4. HRM using AI & Data Science 5. Human Values	3	0	0		3	100	40	30	70	
<b>Total</b>			<b>11</b>	<b>0</b>	<b>0</b>		<b>11</b>	<b>400</b>	--	--	--	--
<b>Practical</b>			<b>L</b>	<b>T</b>	<b>P</b>		<b>Cr</b>	<b>FM</b>	<b>Overall Pass Marks</b>	<b>Internal</b>	<b>External</b>	<b>Categorization</b>
05		<b>ADVANCE LAB-I</b> (Web Programming using PHP Lab)	0	0	3	1.5	50	25	30	20		
06		<b>ADVANCE LAB-II</b> (AI & Data Analytics Lab)	0	0	3	1.5	50	25	30	20		
07		Entrepreneurship Development And Startups Lab	0	0	2	1	50	25	30	20		
08		Seminar And Report Writing (On UN SUSTAINABLE DEVELOPMENT GOALS)	0	0	2	1	50	25	30	20		
<b>Total</b>			<b>0</b>	<b>0</b>	<b>10</b>	<b>5</b>	<b>200</b>	--	--	--	--	

Audit Course			L	T	P	Cr	FM	Overall Pass Marks	Internal	External	Categorization	
09		<b>FOREIGN LANGUAGE OR REGIONAL LANGUAGE (ANY ONE)</b> <b>FOREIGN LANGUAGE</b> 1. GERMAN 2. JAPANESE 3. CHINESE 4. KOREAN 5. SPANISH 6. RUSSIAN <b>REGIONAL LANGUAG</b> 7. MARATHI 8. KANNAD 9. TAMIL 10. TELUGU	0					100	40	--	100	
								Students will complete this Audit Paper of 12 weeks duration from NPTEL/SWAYAM. It is mandatory to pass this paper in order to pass this semester. Student may register on NPTEL/SWAYAM at any time from 1 <sup>st</sup> to 5 <sup>th</sup> semester but the passing marks and credits will be reflected only in the 5 <sup>th</sup> semester. The passing marks and certificate shall be forwarded by the institute to Controller of Examination (CoE), JUT, Ranchi timely.				
10		Sports/NCC/NSS/YOGA/Painting/Music/ Classical Dance	6				0	50	25	30	20	
<b>Internship</b>			L	T	P							
10		Field Projects/ Community Engagement Projects/ Mini Project	8 weeks				2	--	--	1/0	--	
<b>Total</b>			0	0	0	0		--	--	--	--	
<b>Grand Total</b>			11	0	10	6	18	750	--	--	--	--

\*AU- Audit Course; L: Lecture, T: Tutorial, P: Practice.

J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.

\*Passing in Audit Course shall be mandatory.



**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Computer Engineering & IOT**

**VI<sup>th</sup> –Semester**

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Industrial Internship/ Project	36 Hours per week / week Total 12-16 Weeks			6	12	--	--	--	--	
02		Seminar & Report Writing on IKS (Bhartiya Gyan Prampra)	0	0	4		2	--	--	--	--	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>		--	--	--	--
<b>Grand Total</b>			<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>14</b>	--	--	--	--	--

**L: Lecture, T: Tutorial, P: Practical.**

**J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.**





**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Cyber System & Information Security**

V<sup>th</sup> –Semester

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Cyber Security	3	0	0	6	3	100	40	30	70	
02		Entrepreneurship Development And Startups	2	0	0		2	100	40	30	70	
03		<b>PROFESSIONAL ELECTIVE (ANY ONE)</b>	3	0	0		3	100	40	30	70	
		1. Full Stack Development 2. Data Analytics 3. IOT 4. Cyber Security Laws 5. Cloud Computing & Big Data 6. .Net Programming Through C# 7. Block Chain Technology										
04		<b>OPEN ELECTIVE (ANY ONE)</b>	3	0	0		3	100	40	30	70	
		1. Design Thinking 2. Automation & Robotics 3. Organizational Behavior 4. HRM using AI & Data Science 5. Human Values										
<b>Total</b>			<b>11</b>	<b>0</b>	<b>0</b>		<b>11</b>	<b>400</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Practical</b>			<b>L</b>	<b>T</b>	<b>P</b>		<b>Cr</b>	<b>FM</b>	<b>Overall Pass Marks</b>	<b>Internal</b>	<b>External</b>	<b>Categorization</b>
05		<b>ADVANCE LAB-I</b> (AI Lab)	0	0	3	1.5	50	25	30	20		
06		<b>ADVANCE LAB-II</b> (Digital Forensic Lab)	0	0	3	1.5	50	25	30	20		
07		Entrepreneurship Development And Startups Lab	0	0	2	1	50	25	30	20		
08		Seminar And Report Writing (On UN SUSTAINABLE DEVELOPMENT GOALS)	0	0	2	1	50	25	30	20		
<b>Total</b>			<b>0</b>	<b>0</b>	<b>10</b>	<b>5</b>	<b>200</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	

Audit Course			L	T	P	Cr	FM	Overall Pass Marks	Internal	External	Categorization	
09		<b>FOREIGN LANGUAGE OR REGIONAL LANGUAGE (ANY ONE)</b> <b>FOREIGN LANGUAGE</b> 1. GERMAN 2. JAPANESE 3. CHINESE 4. KOREAN 5. SPANISH 6. RUSSIAN <b>REGIONAL LANGUAG</b> 7. MARATHI 8. KANNAD 9. TAMIL 10. TELUGU	0					100	40	--	100	
							Students will complete this Audit Paper of 12 weeks duration from NPTEL/SWAYAM. It is mandatory to pass this paper in order to pass this semester. Student may register on NPTEL/SWAYAM at any time from 1 <sup>st</sup> to 5 <sup>th</sup> semester but the passing marks and credits will be reflected only in the 5 <sup>th</sup> semester. The passing marks and certificate shall be forwarded by the institute to Controller of Examination (CoE), JUT, Ranchi timely.					
10		Sports/NCC/NSS/YOGA/Painting/Music/ Classical Dance	6			0	50	25	30	20		
<b>Internship</b>			L	T	P							
11		Field Projects/ Community Engagement Projects/ Mini Project	8 weeks			2	--	--	1/0	--		
<b>Total</b>			0	0	0	0		--	--	--	--	
<b>Grand Total</b>			11	0	10	6	18	750	--	--	--	

\*AU- Audit Course; L: Lecture, T: Tutorial, P: Practice.

J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.

\*Passing in Audit Course shall be mandatory.



**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Cyber System & Information Security**

**VI<sup>th</sup> –Semester**

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Industrial Internship/ Project	36 Hours per week / week Total 12-16 Weeks			6	12	--	--	--	--	
02		Seminar & Report Writing on IKS (Bhartiya Gyan Prampra)	0	0	4		2	--	--	--	--	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>		--	--	--	--
<b>Grand Total</b>			<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>14</b>	--	--	--	--	--

**L: Lecture, T: Tutorial, P: Practical.**

**J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.**





**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Electronics & Communication Engineering**

V<sup>th</sup> –Semester

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Artificial Intelligence & Machine Learning	3	0	0	6	3	100	40	30	70	
02		Entrepreneurship Development And Startups	2	0	0		2	100	40	30	70	
03		<b>PROFESSIONAL ELECTIVE (ANY ONE)</b>	3	0	0		3	100	40	30	70	
		1. Mobile & Wireless Communication 2. Mobile Technology 3. Optical Fiber Communication 4. Signal & System 5. IIOT										
04		<b>OPEN ELECTIVE (ANY ONE)</b>	3	0	0		3	100	40	30	70	
		1. Cyber Security 2. Cloud Computing & Cyber Security 3. IOT 4. Block Chain Technology 5. Drone Technology & Robotics 6. Data Analytics 7. Automation & Robotics 8. Embedded System with ARDUINO										
<b>Total</b>			<b>11</b>	<b>0</b>	<b>0</b>		<b>11</b>	<b>400</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Practical</b>			<b>L</b>	<b>T</b>	<b>P</b>		<b>Cr</b>	<b>FM</b>	<b>Overall Pass Marks</b>	<b>Internal</b>	<b>External</b>	<b>Categorization</b>
05		<b>ADVANCE LAB-I</b> (Industrial & Power Electronics Lab)	0	0	3	1.5	50	25	30	20		
06		<b>ADVANCE LAB-II</b> (IIOT & ARDUINO Lab)	0	0	3	1.5	50	25	30	20		
07		Entrepreneurship Development And Startups Lab	0	0	2	1	50	25	30	20		
08		Seminar And Report Writing (On UN SUSTAINABLE DEVELOPMENT GOALS)	0	0	2	1	50	25	30	20		
<b>Total</b>			<b>0</b>	<b>0</b>	<b>10</b>	<b>5</b>	<b>200</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	

Audit Course			L	T	P	Cr	FM	Overall Pass Marks	Internal	External	Categorization	
09		<b>FOREIGN LANGUAGE OR REGIONAL LANGUAGE (ANY ONE)</b> <b>FOREIGN LANGUAGE</b> 1. GERMAN 2. JAPANESE 3. CHINESE 4. KOREAN 5. SPANISH 6. RUSSIAN <b>REGIONAL LANGUAG</b> 7. MARATHI 8. KANNAD 9. TAMIL 10. TELUGU	0					100	40	--	100	
							Students will complete this Audit Paper of 12 weeks duration from NPTEL/SWAYAM. It is mandatory to pass this paper in order to pass this semester. Student may register on NPTEL/SWAYAM at any time from 1 <sup>st</sup> to 5 <sup>th</sup> semester but the passing marks and credits will be reflected only in the 5 <sup>th</sup> semester. The passing marks and certificate shall be forwarded by the institute to Controller of Examination (CoE), JUT, Ranchi timely.					
10		Sports/NCC/NSS/YOGA/Painting/Music/ Classical Dance	6			0	50	25	30	20		
<b>Internship</b>			L	T	P	<b>Cr</b>	<b>FM</b>	<b>Overall Pass Marks</b>	<b>Internal</b>	<b>External</b>	<b>Categorization</b>	
11		Field Projects/ Community Engagement Projects/ Mini Project	8 weeks			2	--	--	1/0	--		
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		--	--	--	--	
<b>Grand Total</b>			<b>11</b>	<b>0</b>	<b>10</b>	<b>6</b>	<b>18</b>	<b>750</b>	--	--	--	

\*AU- Audit Course; L: Lecture, T: Tutorial, P: Practice.

J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.

\*Passing in Audit Course shall be mandatory.



**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Electronics & Communication Engineering**

**VI<sup>th</sup> –Semester**

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Industrial Internship/ Project	36 Hours per week / week Total 12-16 Weeks			6	12	--	--	--	--	
02		Seminar & Report Writing on IKS (Bhartiya Gyan Prampra)	0	0	4		2	--	--	--	--	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>		--	--	--	--
<b>Grand Total</b>			<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>14</b>	--	--	--	--	--

**L: Lecture, T: Tutorial, P: Practical.**

**J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.**





**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Electrical Engineering/ Electrical & Electronics Engineering**

V<sup>th</sup> –Semester

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Industrial Automation	3	0	0	6	3	100	40	30	70	
02		Entrepreneurship Development And Startups	2	0	0		2	100	40	30	70	
03		<b>PROFESSIONAL ELECTIVE (ANY ONE)</b> 1. Electrical Vehicle 2. Renewable Energy Technology 3. Smart Grid Technology 4. Power System Operation & Control 5. Power Electronics & Drives	3	0	0		3	100	40	30	70	
04		<b>OPEN ELECTIVE (ANY ONE)</b> 1. AI & ML 2. Cloud Computing & Cyber Security 3. IOT 4. Block Chain Technology 5. Drone Technology & Robotics 6. Data Analytics	3	0	0		3	100	40	30	70	
<b>Total</b>			<b>11</b>	<b>0</b>	<b>0</b>		<b>11</b>	<b>400</b>	--	--	--	--
<b>Practical</b>			<b>L</b>	<b>T</b>	<b>P</b>		<b>Cr</b>	<b>FM</b>	<b>Overall Pass Marks</b>	<b>Internal</b>	<b>External</b>	<b>Categorization</b>
05		<b>ADVANCE LAB-I</b> (Programmable Logic Controllers Lab & MAT Lab)	0	0	3	1.5	50	25	30	20		
06		<b>ADVANCE LAB-II</b> ( Power Electronics & Power System Lab)	0	0	3	1.5	50	25	30	20		
07		Entrepreneurship Development And Startups Lab	0	0	2	1	50	25	30	20		
08		Seminar And Project Initiation Course (On UN SUSTAINABLE DEVELOPMENT GOALS)	0	0	2	1	50	25	30	20		
<b>Total</b>			<b>0</b>	<b>0</b>	<b>10</b>	<b>5</b>	<b>200</b>	--	--	--	--	

Audit Course			L	T	P	Cr	FM	Overall Pass Marks	Internal	External	Categorization
09		<b>FOREIGN LANGUAGE OR REGIONAL LANGUAGE (ANY ONE)</b> <b>FOREIGN LANGUAGE</b> 1. GERMAN 2. JAPANESE 3. CHINESE 4. KOREAN 5. SPANISH 6. RUSSIAN <b>REGIONAL LANGUAG</b> 7. MARATHI 8. KANNAD 9. TAMIL 10. TELUGU	0			0	100	40	--	100	
10		Sports/NCC/NSS/YOGA/Painting/Music/ Classical Dance	6			0	50	25	30	20	
<b>Internship</b>			L	T	P	<b>Cr</b>	<b>FM</b>	<b>Overall Pass Marks</b>	<b>Internal</b>	<b>External</b>	<b>Categorization</b>
11		Field Projects/ Community Engagement Projects/ Mini Project	8 weeks			2	--	--	1/0	--	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		--	--	--	--
<b>Grand Total</b>			<b>11</b>	<b>0</b>	<b>10</b>	<b>6</b>	<b>18</b>	<b>750</b>	--	--	--

\*AU- Audit Course; L: Lecture, T: Tutorial, P: Practice.

J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.

\*Passing in Audit Course shall be mandatory.



**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Electrical Engineering/ Electrical & Electronics Engineering**

**VI<sup>th</sup> –Semester**

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Industrial Internship/ Project	36 Hours per week / week Total 12-16 Weeks			6	12	--	--	--	--	
02		Seminar & Report Writing on IKS (Bhartiya Gyan Prampra)	0	0	4		2	--	--	--	--	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>		--	--	--	--
<b>Grand Total</b>			<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>14</b>	--	--	--	--	--

**L: Lecture, T: Tutorial, P: Practical.**

**J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.**





**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Mechanical Engineering**

V<sup>th</sup> –Semester

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Product Design & Development	3	0	0	6	3	100	40	30	70	
02		Entrepreneurship Development And Startups	2	0	0		2	100	40	30	70	
03		<b>PROFESSIONAL ELECTIVE (ANY ONE)</b>	3	0	0		3	100	40	30	70	
		1. Heating, Ventilation & Air Conditioning (HVAC) 2. Automation & Robotics 3. Advance Manufacturing Technology 4. Power Plant Engineering 5. E-Mobility-										
04		<b>OPEN ELECTIVE (ANY ONE)</b>	3	0	0		3	100	40	30	70	
		1. AI & ML 2. Cloud Computing & Cyber Security 3. IOT 4. Block Chain Technology 5. Drone Technology & Robotics 6. Data Analytics										
<b>Total</b>			<b>11</b>	<b>0</b>	<b>0</b>		<b>11</b>	<b>400</b>	--	--	--	--
<b>Practical</b>			<b>L</b>	<b>T</b>	<b>P</b>		<b>Cr</b>	<b>FM</b>	<b>Overall Pass Marks</b>	<b>Internal</b>	<b>External</b>	<b>Categorization</b>
05		<b>ADVANCE LAB-I</b> (Metrology Lab)	0	0	3	1.5	50	25	30	20		
06		<b>ADVANCE LAB-II</b> (Refrigeration & Air Conditioner Lab)	0	0	3	1.5	50	25	30	20		
07		Entrepreneurship Development And Startups Lab	0	0	2	1	50	25	30	20		
08		Seminar And Report Writing (On UN SUSTAINABLE DEVELOPMENT GOALS)	0	0	2	1	50	25	30	20		
<b>Total</b>			<b>0</b>	<b>0</b>	<b>10</b>	<b>5</b>	<b>200</b>	--	--	--	--	

Audit Course			L	T	P	Cr	FM	Overall Pass Marks	Internal	External	Categorization	
09		<b>FOREIGN LANGUAGE OR REGIONAL LANGUAGE (ANY ONE)</b> <b>FOREIGN LANGUAGE</b> 1. GERMAN 2. JAPANESE 3. CHINESE 4. KOREAN 5. SPANISH 6. RUSSIAN <b>REGIONAL LANGUAG</b> 7. MARATHI 8. KANNAD 9. TAMIL 10. TELUGU	0					100	40	--	100	
							Students will complete this Audit Paper of 12 weeks duration from NPTEL/SWAYAM. It is mandatory to pass this paper in order to pass this semester. Student may register on NPTEL/SWAYAM at any time from 1 <sup>st</sup> to 5 <sup>th</sup> semester but the passing marks and credits will be reflected only in the 5 <sup>th</sup> semester. The passing marks and certificate shall be forwarded by the institute to Controller of Examination (CoE), JUT, Ranchi timely.					
10		Sports/NCC/NSS/YOGA/Painting/Music/ Classical Dance	6			0	50	25	30	20		
<b>Internship</b>			L	T	P	Cr	FM	Overall Pass Marks	Internal	External	Categorization	
11		FIELD PROJECTS/ COMMUNITY ENGAGEMENT PROJECTS/ MINI PROJECT	8 weeks			2	--	--	1/0	--		
<b>Total</b>			0	0	0	0		--	--	--	--	
<b>Grand Total</b>			11	0	10	6	18	750	--	--	--	

\*AU- Audit Course; L: Lecture, T: Tutorial, P: Practice.

J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.

\*Passing in Audit Course shall be mandatory.



**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Mechanical Engineering**

**VI<sup>th</sup> –Semester**

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Industrial Internship/ Project	36 Hours per week / week Total 12-16 Weeks			6	12	--	--	--	--	
02		Seminar & Report Writing on IKS (Bhartiya Gyan Prampra)	0	0	4		2	--	--	--	--	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>		--	--	--	--
<b>Grand Total</b>			<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>14</b>	--	--	--	--	--

**L: Lecture, T: Tutorial, P: Practical.**

**J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.**





**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Metallurgical Engineering**

V<sup>th</sup> –Semester

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Production & Processing of Steel	3	0	0	6	3	100	40	30	70	
02		Entrepreneurship Development And Startups	2	0	0		2	100	40	30	70	
03		<b>PROFESSIONAL ELECTIVE (ANY ONE)</b> 1. Non Destructive Testing 2. Powders for Additive Manufacturing & Metals Joining 3. Welding Technology 4. Advance Manufacturing Technology 5. Mechanical Metallurgy 6. Material Technology 7. Degradation of Materials 8. Advance Materials	3	0	0		3	100	40	30	70	
04		<b>OPEN ELECTIVE (ANY ONE)</b> 1. AI & ML 2. Cloud Computing & Cyber Security 3. IOT 4. Block Chain Technology 5. Drone Technology & Robotics 6. Data Analytics	3	0	0		3	100	40	30	70	
<b>Total</b>			<b>11</b>	<b>0</b>	<b>0</b>		<b>11</b>	<b>400</b>	--	--	--	--
<b>Practical</b>			<b>L</b>	<b>T</b>	<b>P</b>		<b>Cr</b>	<b>FM</b>	<b>Overall Pass Marks</b>	<b>Internal</b>	<b>External</b>	<b>Categorization</b>
05		<b>ADVANCE LAB-I</b> (Non Destructive Testing Lab)	0	0	3		1.5	50	25	30	20	
06		<b>ADVANCE LAB-II</b> (Welding Metallurgy Lab)	0	0	3		1.5	50	25	30	20	
07		Entrepreneurship Development And Startups Lab	0	0	2	1	50	25	30	20		
08		Seminar And Report Writing (On UN SUSTAINABLE DEVELOPMENT GOALS)	0	0	2	1	50	25	30	20		
<b>Total</b>			<b>0</b>	<b>0</b>	<b>10</b>	<b>5</b>	<b>200</b>	--	--	--	--	

Audit Course			L	T	P	Cr	FM	Overall Pass Marks	Internal	External	Categorization	
09		<b>FOREIGN LANGUAGE OR REGIONAL LANGUAGE (ANY ONE)</b> <b>FOREIGN LANGUAGE</b> 1. GERMAN 2. JAPANESE 3. CHINESE 4. KOREAN 5. SPANISH 6. RUSSIAN <b>REGIONAL LANGUAG</b> 7. MARATHI 8. KANNAD 9. TAMIL 10. TELUGU	0					100	40	--	100	
								Students will complete this Audit Paper of 12 weeks duration from NPTEL/SWAYAM. It is mandatory to pass this paper in order to pass this semester. Student may register on NPTEL/SWAYAM at any time from 1 <sup>st</sup> to 5 <sup>th</sup> semester but the passing marks and credits will be reflected only in the 5 <sup>th</sup> semester. The passing marks and certificate shall be forwarded by the institute to Controller of Examination (CoE), JUT, Ranchi timely.				
10		Sports/NCC/NSS/YOGA/Painting/Music/ Classical Dance	6				0	50	25	30	20	
<b>Internship</b>			L	T	P	<b>Cr</b>	<b>FM</b>	<b>Overall Pass Marks</b>	<b>Internal</b>	<b>External</b>	<b>Categorization</b>	
11		Field Projects/ Community Engagement Projects/ Mini Project	8 weeks			2	--	--	1/0	--	--	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		--	--	--	--	
<b>Grand Total</b>			<b>11</b>	<b>0</b>	<b>10</b>	<b>6</b>	<b>18</b>	<b>750</b>	--	--	--	

\*AU- Audit Course; L: Lecture, T: Tutorial, P: Practice.

J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.

\*Passing in Audit Course shall be mandatory.



**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Metallurgical Engineering**

**VI<sup>th</sup> –Semester**

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Industrial Internship/ Project	36 Hours per week / week Total 12-16 Weeks			6	12	--	--	--	--	
02		Seminar & Report Writing on IKS (Bhartiya Gyan Prampra)	0	0	4		2	--	--	--	--	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>		--	--	--	--
<b>Grand Total</b>			<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>14</b>	--	--	--	--	--

**L: Lecture, T: Tutorial, P: Practical.**

**J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.**





**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Interior Design**

V<sup>th</sup> –Semester

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Interior Design	3	0	0	6	3	100	40	30	70	
02		Entrepreneurship Development And Startups	2	0	0		2	100	40	30	70	
03		<b>PROFESSIONAL ELECTIVE (ANY ONE)</b> 1. Advance Architectural Design 2. Professional Practice & Building Byelaws 3. Design Styles & Interior Space Planning 4. Interior Detailing & Estimation 5. Product Design & Interior Finishes 6. Green Interiors & Landscape 7. Furniture Design	3	0	0		3	100	40	30	70	
04		<b>OPEN ELECTIVE (ANY ONE)</b> 1. AI & ML 2. Cloud Computing & Cyber Security 3. IOT 4. Block Chain Technology 5. Drone Technology & Robotics 6. Data Analytics	3	0	0		3	100	40	30	70	
<b>Total</b>			<b>11</b>	<b>0</b>	<b>0</b>		<b>11</b>	<b>400</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Practical</b>			<b>L</b>	<b>T</b>	<b>P</b>		<b>Cr</b>	<b>FM</b>	<b>Overall Pass Marks</b>	<b>Internal</b>	<b>External</b>	<b>Categorization</b>
05		<b>ADVANCE LAB-I</b> ( Advance Architectural Design Lab)	0	0	3	1.5	50	25	30	20		
06		<b>ADVANCE LAB-II</b> (Interior Design Lab)	0	0	3	1.5	50	25	30	20		
07		Entrepreneurship Development And Startups Lab	0	0	2	1	50	25	30	20		
08		Seminar And Report Writing (On UN SUSTAINABLE DEVELOPMENT GOALS)	0	0	2	1	50	25	30	20		
<b>Total</b>			<b>0</b>	<b>0</b>	<b>10</b>	<b>5</b>	<b>200</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	

Audit Course			L	T	P	Cr	FM	Overall Pass Marks	Internal	External	Categorization
09		<b>FOREIGN LANGUAGE OR REGIONAL LANGUAGE (ANY ONE)</b> <b>FOREIGN LANGUAGE</b> 1. GERMAN 2. JAPANESE 3. CHINESE 4. KOREAN 5. SPANISH 6. RUSSIAN <b>REGIONAL LANGUAG</b> 7. MARATHI 8. KANNAD 9. TAMIL 10. TELUGU	0				100	40	--	100	
							Students will complete this Audit Paper of 12 weeks duration from NPTEL/SWAYAM. It is mandatory to pass this paper in order to pass this semester. Student may register on NPTEL/SWAYAM at any time from 1 <sup>st</sup> to 5 <sup>th</sup> semester but the passing marks and credits will be reflected only in the 5 <sup>th</sup> semester. The passing marks and certificate shall be forwarded by the institute to Controller of Examination (CoE), JUT, Ranchi timely.				
10		Sports/NCC/NSS/YOGA/Painting/Music/ Classical Dance	6			0	50	25	30	20	
<b>Internship</b>			L	T	P						
11		FIELD PROJECTS/ COMMUNITY ENGAGEMENT PROJECTS/ MINI PROJECT	8 weeks			2	--	--	1/0	--	
<b>Total</b>			0	0	0	0		--	--	--	--
<b>Grand Total</b>			11	0	10	6	18	750	--	--	--

\*AU- Audit Course; L: Lecture, T: Tutorial, P: Practice.

J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.

\*Passing in Audit Course shall be mandatory.



**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Interior Design**

**VI<sup>th</sup> –Semester**

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Industrial Internship/ Project	36 Hours per week / week Total 12-16 Weeks			6	12	--	--	--	--	
02		Seminar & Report Writing on IKS (Bhartiya Gyan Prampra)	0	0	4		2	--	--	--	--	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>		--	--	--	--
<b>Grand Total</b>			<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>14</b>	--	--	--	--	--

**L: Lecture, T: Tutorial, P: Practical.**

**J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.**





**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Mining Engineering**

V<sup>th</sup> –Semester

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Winning & Working (Metal & Coal)	3	0	0	6	3	100	40	30	70	
02		Entrepreneurship Development And Startups	2	0	0		2	100	40	30	70	
03		<b>PROFESSIONAL ELECTIVE (ANY ONE)</b> 1. Rock Mechanics 2. Mine Legislation & Management 3. Health & Safety in Mining 4. Mine & Mineral Economics 5. Pollution Control in Mine 6. Application of IT in Mining	3	0	0		3	100	40	30	70	
04		<b>OPEN ELECTIVE (ANY ONE)</b> 1. AI & ML 2. Cloud Computing & Cyber Security 3. IOT 4. Block Chain Technology 5. Drone Technology & Robotics 6. Data Analytics	3	0	0		3	100	40	30	70	
<b>Total</b>			<b>11</b>	<b>0</b>	<b>0</b>		<b>11</b>	<b>400</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>Practical</b>			<b>L</b>	<b>T</b>	<b>P</b>		<b>Cr</b>	<b>FM</b>	<b>Overall Pass Marks</b>	<b>Internal</b>	<b>External</b>	<b>Categorization</b>
05		<b>ADVANCE LAB-I</b> (Winning & Working (Metal & Coal) Lab)	0	0	3		1.5	50	25	30	20	
06		<b>ADVANCE LAB-II</b> (Rock Mechanics Lab)	0	0	3		1.5	50	25	30	20	
07		Entrepreneurship Development And Startups Lab	0	0	2	1	50	25	30	20		
08		Seminar And Report Writing (On UN SUSTAINABLE DEVELOPMENT GOALS)	0	0	2	1	50	25	30	20		
<b>Total</b>			<b>0</b>	<b>0</b>	<b>10</b>	<b>5</b>	<b>200</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	

Audit Course			L	T	P	Cr	FM	Overall Pass Marks	Internal	External	Categorization	
09		<b>FOREIGN LANGUAGE OR REGIONAL LANGUAGE (ANY ONE)</b> <b>FOREIGN LANGUAGE</b> 1. GERMAN 2. JAPANESE 3. CHINESE 4. KOREAN 5. SPANISH 6. RUSSIAN <b>REGIONAL LANGUAG</b> 7. MARATHI 8. KANNAD 9. TAMIL 10. TELUGU	0					100	40	--	100	
							Students will complete this Audit Paper of 12 weeks duration from NPTEL/SWAYAM. It is mandatory to pass this paper in order to pass this semester. Student may register on NPTEL/SWAYAM at any time from 1 <sup>st</sup> to 5 <sup>th</sup> semester but the passing marks and credits will be reflected only in the 5 <sup>th</sup> semester. The passing marks and certificate shall be forwarded by the institute to Controller of Examination (CoE), JUT, Ranchi timely.					
10		Sports/NCC/NSS/YOGA/Painting/Music/ Classical Dance	6			0	50	25	30	20		
<b>Internship</b>			L	T	P							
11		Field Projects/ Community Engagement Projects/ Mini Project	8 weeks			2	--	--	1/0	--		
<b>Total</b>			0	0	0	0		--	--	--	--	
<b>Grand Total</b>			11	0	10	6	18	750	--	--	--	

\*AU- Audit Course; L: Lecture, T: Tutorial, P: Practice.

J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.

\*Passing in Audit Course shall be mandatory.



**Jharkhand University of Technology, Ranchi**  
**NEP-2020 based Syllabus w.e.f – 2025-26 batch**  
**Branch- Mining Engineering**

**VI<sup>th</sup> –Semester**

S.No.	Course Code	Course Title	L	T	P	J	Cr	FM	Overall Pass Marks	Internal	External	Categorization
			Contact Hours per week									
01		Industrial Internship/ Project	36 Hours per week / week Total 12-16 Weeks			6	12	--	--	--	--	
02		Seminar & Report Writing on IKS (Bhartiya Gyan Prampra)	0	0	4		2	--	--	--	--	
<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>		--	--	--	--
<b>Grand Total</b>			<b>0</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>14</b>	--	--	--	--	--

**L: Lecture, T: Tutorial, P: Practical.**

**J- Self learning hours shall not be reflected in the Time table. Self-learning includes micro project/ assignment/ other activities as mentioned in earlier semester.**