



JOY UNIVERSITY  
semper paratus

**School of Computational Intelligence**  
**Department of Engineering & Technology**  
**B.Tech. Civil Engineering – I Semester**

Sl.No	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	BTMA-101	Mathematics-I	3	1	0	4	4
2.	BTPH-101	Physics	3	1	0	4	4
3.	BTBT-101	Biology for Engineers	3	0	0	3	3
4.	BTHS-101	English for Communications	3	0	0	3	3
5.	BTEE-101	Basic Electrical Engineering	3	1	0	4	4
6.	BLCV-101	Engineering Drawing and Computer Graphics	0	0	3	3	2
7.	BLPH-101	Physics Lab	0	0	3	3	2
8.	BLCS-101	Programming for Problem Solving	1	0	3	4	3
9.	BLEE-101	Basic Electrical Engineering Lab	0	0	3	3	2
10.	BLEA-101	Extra Academic Activity-I	0	0	3	3	2
		<b>TOTAL</b>				<b>34</b>	<b>29</b>

**B.Tech. Civil Engineering – II Semester**

Sl.No	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	BTMA-102	Mathematics-II	3	1	0	4	4
2.	BTCY-101	Chemistry	3	1	0	4	4
3.	BTCV-101	Engineering Mechanics	3	1	0	4	4
4.	BTCV-102	Environment and Safety Engineering	3	0	0	3	3
5.	BTEC-101	Basic Electronics Engineering	3	1	0	4	4
6.	BLME-101	Introduction to Manufacturing Processes/Workshop	0	0	3	3	2
7.	BLCY-101	Chemistry Lab	0	0	3	3	2
8.	BLCV-102	Object Oriented Programming	1	0	3	4	3
9.	BLEC-101	Basic Electronics Engineering Lab	0	0	3	3	2
10.	BLEA-102	Extra Academic Activity-II	0	0	3	3	2
		<b>TOTAL</b>				<b>35</b>	<b>30</b>

**B.Tech. Civil Engineering – III Semester**

<b>Sl.No</b>	<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Contact Hrs / Wk</b>	<b>Credits</b>
1.	BTMA-201	Numerical Techniques (Mathematics-III)	3	1	0	4	4
2.	BTCV-201	Surveying and Geomatics	3	0	0	3	3
3.	BTCV-202	Material Testing and Evaluation	3	0	0	3	3
4.	BTCV-203	Structural Analysis-I	3	1	0	4	4
5.	BTCV-204	Mechanics of Solids	3	1	0	4	4
6.	BLCV-201	Building Planning and Drawing	0	0	3	3	2
7.	BLCV-202	Surveying Lab	0	0	3	3	2
8.	BLCV-203	Material Testing Lab	0	0	3	3	2
9.	BLCV-204	Mechanics of Solids Lab	0	0	3	3	2
		<b>TOTAL</b>				<b>30</b>	<b>26</b>

**B.Tech. Civil Engineering – IV Semester**

<b>Sl.No</b>	<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Contact Hrs / Wk</b>	<b>Credits</b>
1.	BTMA-202	Probability, Statistics and Stochastic Processes (Mathematics-IV)	3	1	0	4	4
2.	BTCV-205	Soil Mechanics	3	1	0	4	4
3.	BTCV-206	Environmental Engineering-I	3	0	0	3	3
4.	BTCV-207	Advanced Structural Analysis (Structural Analysis-II)	3	0	0	3	3
5.	BTCV-208	Architecture and Town Planning	3	0	0	3	3
6.	BLCV-205	Geotechnical Engineering Lab	0	0	3	3	2
7.	BLCV-206	Environmental Engineering Lab	0	0	3	3	2
8.	BTCV-207	Computer Aided Design Practice	0	0	3	3	2
9.	BLMA-201	Mathematics-III and IV Lab	0	0	3	3	2
		<b>TOTAL</b>				<b>29</b>	<b>25</b>

### B.Tech. Civil Engineering – V Semester

Sl.No	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	BTCV-301	Design of Concrete Structure	3	0	0	3	3
2.	BTCV-302	Transportation Engineering	3	1	0	4	4
3.	BTCV-303	Estimation and Construction Management	3	1	0	4	4
4.	BTCV-304	Fluid Mechanics and Hydraulic Machines	3	1	0	4	4
5.	BTCV-305	Design of Structural Systems	3	1	0	4	4
6.	BLCV-301	Design of Concrete Structure Lab	0	0	3	3	2
7.	BLCV-302	Transportation Engineering Lab	0	0	3	3	2
8.	BLCV-303	Structural Design and Detailing	0	0	3	3	2
		<b>TOTAL</b>				<b>28</b>	<b>25</b>

### B.Tech. Civil Engineering – VI Semester

Sl.No	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	BTCV-306	Design of Steel Structures	3	1	0	4	4
2.	BTCV-307	Pavement Analysis and Design	3	0	0	3	3
3.	BTCV-308	Advanced Mechanics of Solids	3	1	0	4	4
4.	BTCV-309	Environmental Engineering-II	3	1	0	4	4
5.	BTCV-310	Computational Fluid Dynamics	3	0	0	3	3
6.	BLCV-304	Fluid Mechanics and Hydraulic Machines Lab	0	0	3	3	2
7.	BLCV-305	Design of Steel Structures	0	0	3	3	2
8.	BLCV-306	Environmental Engineering-II Lab	0	0	3	3	2
		<b>TOTAL</b>				<b>27</b>	<b>24</b>

### B.Tech. Civil Engineering – VII Semester

Sl.No	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	BTCV-401	Water Resources Engineering	3	1	0	4	4
2.	BTCV-402	Advanced Transportation Engineering	3	0	0	3	3
3.	BTCV-403	Ground Improvement Engineering	3	0	0	3	3
4.	BTCV-404	Remote Sensing and Geographical Information System	3	0	0	3	3
5.	BTHS-401	Business Research Methodology/Entrepreneurship Development	3	0	0	3	3
6.	BTCV-405	Finite Element Methods	3	0	0	3	3
7.	BPCV-401	Project Part-I	0	0	6	6	4
8.	BLCV-401	Water Resource Engineering Design Lab	0	0	3	3	2
9.	BSCV-401	Industrial Training Defense	0	0	0	0	2
		<b>TOTAL</b>				<b>28</b>	<b>27</b>

### B.Tech. Civil Engineering – VIII Semester

Sl.No	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	BTCV-406	Irrigation Engineering	3	1	0	4	4
2.	BTCV-407	Pre-stressed Concrete	3	0	0	3	3
3.	BTCV-408	Environmental Impact Assessment	3	0	0	3	3
4.	BTCV-409	Groundwater Hydrology	3	0	0	3	3
5.	BLCV-402	Structural Engineering Laboratory	0	0	3	3	2
6.	BLCV-403	Artificial Intelligence and Machine Learning Techniques in Civil Engineering	2	0	3	5	4
7.	BCCV-401	Comprehensive Viva-Voce	0	0	0	0	2
8.	BPCV-402	Project Part-II	0	0	6	6	4
		<b>TOTAL</b>				<b>27</b>	<b>25</b>