

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI.**  
**In association with**  
**KARNATAKA GERMAN MULTI SKILL DEVELOPMENT CENTER**  
**KGMSDC BANGLORE**



Scheme of Teaching and Examinations  
**Post Graduate Certificate Program in IT & Networking Engineering**  
(Effective from the Academic year 2024-25)

Visvesvaraya Technological University  
Jnana Sangam, Machhe, Belagavi-590018  
eMail: registrar@vtu.ac.in  
contact: 0831-2498112

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Scheme of Teaching and Examinations – 2024

**Choice Based Credit System (CBCS) and Outcome-Based Education(OBE)**

**FIRST SEMESTER**

Sl. No.	Course Category	Course Code No.	Course Title	Hours per week			Total contact hours /week	Examination				Credits
				L-Theory	T-Tutorial	P-Practical / Skill development activities		Duration in hours	CIE Marks	SEE Marks	Total Marks	
1.	Mandatory course first semester	IP101	Induction Program Two weeks	8 days intensive			40	-	-	-	-	0
2.	Program Core courses	PC101	Computer System Infrastructure	2	1	0	3	3	50	50	100	3
3.	Program Core courses	PC102	Computer Networking	3	1	0	4	3	50	50	100	4
4.	Program Core courses	PC103	Network programming languages	1	1	0	2	3	50	50	100	2

5.	Program Core courses	PC104	Computer System Infrastructure Practicals	0	0	4	4	3	50	50	100	2
6.	Program Core courses	PC105	Computer Networking Practicals	0	0	4	4	3	50	50	100	2
7.	Program Core courses	PC106	Network programming languages Practicals	0	0	4	4	3	50	50	100	2
8.	Internship	SI101	Internship (2 weeks) after I Semester	0	0	2	2	3	100	--	100	1
9.	Major Project:	PR101	Major Project: Network Design and Establishment of network	0	0	8	8	3	100	--	100	4
10	Audit	AU102	Environmental Science	2	0	0	1	3	50	50	100	0
11	Audit	AU102	Essence of Indian Knowledge and Tradition	2	0	0	1	3	50	50	100	0
Total									1000			20

**Note:**

1. **Induction Program** is Mandatory
2. **Project with Seminar:** This may be hands-on practice, survey report, data collection and analysis, coding, mobile app development, field visit and report preparation, modelling of system, simulation, analysing and authenticating, case studies, etc.
3. CIE marks shall be awarded by a committee comprising of HoD as Chairman, Guide/co-guide, if any, and a senior faculty of the department. Students can present the seminar based on the completed mini-project. Participation in the seminar by all postgraduate students of the program shall be mandatory.

4. The CIE marks awarded for Mini-Project work and Seminar, shall be based on the evaluation of Mini Project work and Report, Presentation skill and performance in Question-and-Answer session in the ratio 50:25:25. Mini-Project with Seminar shall be considered as a head of passing and shall be considered for vertical progression as well as for the award of degree. Those, who do not take-up/complete the Mini Project and Seminar shall be declared as fail in that course and have to complete the same during the subsequent semester. There is no SEE for this course.
5. **Internship:** All the students shall have to undergo a mandatory internship of **02 weeks** during the vacation of I and II semesters. prescribed internship credit shall be counted in the same semester. The internship shall be considered as a head of passing and shall be considered for vertical progression as well as for the award of degree. Those, who do not take-up/complete the internship shall be declared as fail in the internship course and have to complete the same during the subsequent University examination after satisfying the internship requirements.
6. The Audit Ability Enhancement Course carries no credit and is not counted for vertical progression. However, a pass in such a course is mandatory for the award of the degree.
7. Skill development activities: Under Skill development activities in a concerning course, the students should
  - a. Interact with industry (small, medium, and large).
  - b. Involve in research/testing/projects to understand their problems and help creative and innovative methods to solve the problem.
  - c. Involve in case studies and field visits/ fieldwork.
  - d. Accustom to the use of standards/codes etc., to narrow the gap between academia and industry.
  - e. Handle advanced instruments to enhance technical talent.
  - f. Gain confidence in modelling of systems and algorithms for transient and steady-state operations, thermal study, etc.
  - g. Work on different software/s (tools) to simulate, analyze and authenticate the output to interpret and conclude.
8. All activities should enhance student's abilities to employment and/or self-employment opportunities, management skills, Statistical analysis, fiscal expertise, etc.
9. Students and the course instructor/s to involve either individually or in groups to interact together to enhance the learning and application skills of the study they have undertaken. The students with the help of the course teacher can take up relevant technical –activities which will enhance their skill. The prepared report shall be evaluated for CIE marks

**SECOND SEMESTER**

Sl. No.	Course Category	Course Code No.	Course Title	Hours per week			Total contact hours /week	Examination				Credits
				L-Theory	T-Tutorial	P-Practical / Skill development activities		Duration in hours	CIE Marks	SEE Marks	Total Marks	
1	Program Core courses	PC201	Linux System administration	2	1	0	3	3	50	50	100	3
2	Program Core courses	PC202	Computer Wireless Networking Technology	2	1	0	3	3	50	50	100	3
3	Program Core courses	PC203	Cloud Computing Technology	2	1	0	3	3	50	50	100	3
4	Program Core courses	PC204	Linux System administration Practicals	0	0	4	4	3	50	50	100	2

5	Program Core courses	PC205	Computer Wireless Networking Technology Practicals	0	0	4	4	3	50	50	100	2
6	Program Core courses	PC206	Cloud Computing Technology Practicals	0	0	4	4	3	50	50	100	2
7	Major Project:	PR201	Major Project: Design and Establishment of Network	0	0	10	10		100	--	100	5
8	Seminar II	SE201	Seminar II	0	0	2	2		100	--	100	1
9	Audit	AU201	Indian Constitution	2	0	0	2	3	50	50	100	0
10	Audit	AU202	Entrepreneurship and Start-ups	3	1	0	4	3	50	50	100	0
	Total								1000			21

**Note:**

- 1. Project Work:** The project work shall be carried out individually. However, in case a disciplinary or interdisciplinary project requires more participants, then a group consisting of not more than three shall be permitted.
- Students in consultation with the guide/co-guide (if any) in disciplinary project or guides/co-guides (if any) of all departments in case of multidisciplinary projects, shall pursue a literature survey and complete the preliminary requirements of the selected Project work. Each student shall prepare a relevant introductory project document, and present a seminar.
- CIE marks shall be awarded by a committee comprising of HoD as Chairman, all Guide/s and co-guide/s (if any) and a senior faculty of the concerned departments. The CIE marks awarded for project work phase -1, shall be based on the evaluation of Project Report, Project Presentation skill, and performance in the Question-and-Answer session in the ratio of 50:25:25.
- Societal Project:** Students in consultation with the internal guide as well as with external guide (much preferable) shall involve in applying technology to workout/proposing viable solutions for societal problems.
- CIE marks shall be awarded by a committee comprising of HoD as Chairman, Guide/co-guide if any, and a senior faculty of the Department. The CIE marks awarded shall be based on the evaluation of Project Report, Project Presentation skill, and performance in the Question-and-Answer session in the ratio of 50:25:25.
- Those, who have not pursued /completed the Societal Project, shall be declared as fail in the course and have to complete the same during subsequent semester/s after satisfying the Societal Project requirements. There is no SEE (University examination) for this course.

**Total Credits 41**