# VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)

Accredited by NAAC with 'A++' Grade

Ibrahimbagh, Hyderabad-500 031, Telangana State, INDIA



# B.E. (IT):Honours Degree Programme in Artificial Intelligence & Machine Learning

# VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)

#### **VISION**

Striving for a symbiosis of technological excellence and human values

#### **MISSION**

To arm the young brains with competitive technology and nurture the holistic development of the individuals for a better tomorrow

#### **QUALITY POLICY**

Education without quality is like a flower without fragrance. It is our earnest resolve to strive towards high standards of teaching, training and developing human resources.

### **DEPARTMENT PROFILE**

#### Vision

 To be a centre of excellence in emerging areas of Information Technology.

#### Mission

- Provide a comprehensive learning experience on latest technologies and applications.
- Equip the stakeholders with technical knowledge and leadership skills with collaboration to become competent professionals.
- Motivate innovation and contribute to the societal issues with human values and professional ethics.

#### DEPARTMENT PROFILE

### **Programme Specific Outcomes (PSOs)**

Our students, upon graduation from the program, will be able to:

- **PSO1**: Identify and develop software solutions using programming languages, tools and AI/ML concepts.
- **PSO2**: Design, develop and maintain secure stand-alone, embedded and networked systems.
- **PSO3**: Analyze the architectures of autonomous or semi-autonomous intelligent systems and apply to real-time scenarios.

## **Programme Educational Objectives (PEOs):**

The programme will enable the graduates to:

- **PEO1**: Pursue higher studies in multidisciplinary areas with research orientation.
- **PEO2**: Develop core IT competencies aligned with emerging industry trends to become global leaders with ethical values.
- **PEO3**: Engage in continuous learning and address the societal problems with sustainable solutions.

# MODALITIES FOR B.E (HONOURS) DEGREE ACADEMIC REGULATIONS.

### **Academic Requirements:**

• In addition to the BE regular programme course structure as specified, the BE (Honours) students must register & complete additional courses as prescribed by the respective Department with a minimum of 18 and a maximum of 20 credits during V to VIII semesters of their study.

### **Eligibility Criteria:**

#### Student should

#### Have CGPA of 7.0 and above

- Have cleared all the courses, as prescribed in the curriculum, in the first attempt.
- Satisfy the mandatory requirement of completing ONE NPTEL Certification Course (as per B.E Regular programme regulations) by the end of IV Semester of their study.
- Batch Size: Minimum of 20 and Maximum of 40 students per Programme.

# VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS) SCHEME OF INSTRUCTION AND EXAMINATION (R-21, R22 & R23)

#### B.E. (IT):Honours Degree Program in Artificial Intelligence & Machine Learning

B.E (IT) Honours Degree in Artificial Intelligence & Machine Learning										
S. No.	Course Code	Name of the Course	Sem	Scheme of Instruction			Scheme of Examination			
				Hours per Week			Duration	Maximum Marks		Credits
				L	T	P	in Hrs	SEE	CIE	Ş
THEORY cum PRACTICALS										
1.	UXXPC5X0IT	Computational Intelligence	V	3	-	-	3	60	40	3
2.	UXXPC5X1IT	Computational Intelligence Lab	V	-	-	2	3	50	30	1
3.	UXXPC6X0IT	Unmanned Autonomous Systems	VI	3	-	-	3	60	40	3
4.	UXXPC6X1IT	Unmanned Autonomous Systems- Lab	VI	-	-	2	3	50	30	1
5.	UXXPC7X0IT	Reinforcement Learning	VII	3	-	-	3	60	40	3
6.	UXXPC7X1IT	Reinforcement Learning Lab	VII	-	-	2	3	50	30	1
7.	UXXPC7X9IT	Course Project	VII	-	-	6	3	50	50	3
TOTAL 9 - 12 _ 380 260									15	
GRAND TOTAL 21 640										
NPTEL Course (AIML related) :12 weeks durations – (3 credits)										3
Total Credits										18