



SHARDA
UNIVERSITY
Beyond Boundaries



**SHARDA SCHOOL OF
COMPUTING SCIENCE
& ENGINEERING**



COURSE

INTRODUCTION TO PROMPT ENGINEERING

(NVI0101)

VALUE ADDED
COURSE BROCHURE-30 HRS
2026-27

ABOUT SCHOOL

Sharda School of Computing Science & Engineering is an open platform for diverse voices where teaching runs parallel to the real world, and students are groomed to join the global workforce. SSCSE is distinguished as one of the top-ranked engineering schools in India. The students at SSCSE benefit through the professional grooming of renowned faculty and industry experts having experience of tackling pressing engineering problems. Students discover their passion in one of the various offered Engineering majors at the Sharda School of Computing Science & Engineering. A student-centric pedagogy, project-based approach and design-driven curriculum provides students with an inclination for complex problem solving, design, innovation, and a passion for learning.

ABOUT DEPARTMENT

The Department of Computer Science & Application stands as a pioneer in higher education, research, and innovation within key realms of computer science and application. The mission of the department is to foster excellence in the realm of computer science and application through the impartation of higher education and cutting-edge research. The department boasts an accomplished faculty with a stellar academic track record and proficiency in cutting-edge technologies. The faculty members bring diverse specializations to the fore, ensuring the fulfilment of teaching and research needs. The entire faculty of the department is associated with esteemed universities, institutions, and government departments.

The commitment is to install a spirit of ingenuity, innovativeness, and technical competence in our students through rigorous competition and consistent guidance. Additionally, the department caters to regional needs by organizing programs for teaching and research communities. The curriculum is designed to provide a robust theoretical foundation complemented by high-quality teaching and extensive practical training. Beyond the regular curriculum, the department hosts workshops, technical seminars, faculty development programs (FDP), short-term training programs (STTP), and conferences, exposing students to real-world problems aligning with industrial and societal needs.

A testament to the success of the department is the fact that many of the alumni are now thriving in esteemed companies such as IBM, American Express Bank, Wipro, Infosys, Samsung, Microsoft, GlobalLogic, CISCO, and HCL, both in India and abroad. Prominent alumni also consist of entrepreneurs and scholars who have made significant contributions to prestigious academic institutions.

VALUE ADDED COURSE (VAC)

The Value added Education Courses aim to provide additional learner centric graded skill oriented training, with the primary objective of improving the employability skills of students.

PURPOSE OF VALUE ADDED COURSE

VACs are pertinent instructional strategies designed to close knowledge gaps in students and provide them a competitive edge in the job market. The courses' well-defined structure makes these VACs highly effective in enhancing students' employability quotient by developing diverse competencies. They help students lay the creative groundwork for passion projects (such as interactive dashboards, business analytics, or sector-specific visual reports) beyond their core academic curriculum, offering skills that can transform their enthusiasm into career opportunities.

ABOUT COURSE

Introduction: Prompt engineering is the practice of designing and refining prompts—questions or instructions—to elicit specific responses from AI models. Think of it as the interface between human intent and machine output. In the vast realm of AI, where models are trained on enormous datasets, the right prompt can be the difference between a model understanding your request or misinterpreting it. Prompt engineering, while a relatively recent discipline, is deeply rooted in the broader history of Natural Language Processing (NLP) and machine learning. Understanding its evolution provides context to its current significance. This course introduces students to the essential concepts and practical skills of prompt engineering, focusing on creating effective prompts for AI models. It covers the basics of prompt design, advanced techniques, practical applications, and ethical considerations. Through hands-on exercises and real-world examples, students will learn to craft, optimize, and deploy prompts across various AI domains, making prompt engineering accessible and applicable to their academic and professional pursuits.

Course Schedule

Week	Topic	Duration Hrs.
1	Introduction to Generative AI	2
2	Key Concepts in Generative AI	2
3	Applications of Generative AI	2
4	Contextual prompts: incorporating context to enhance performance	2
5	Dynamic and adaptive prompts: creating flexible and responsive prompts	2
6	Evaluation and iteration: methods for evaluating and improving prompts	2
7	Writing Essentials: Boosting Skills with AI	2
8	Understanding Digital Personas	2
9	Portfolio Development	2
10	Excel Basics for Data Analysis	2
11	Advanced Excel Techniques	2
12	Google App Script for Automation	2
13	Using prompts in real-world scenarios: case studies and hands-on exercises	2
14	Ethical considerations in prompt engineering: bias detection and mitigation	2
15	Special applications: creative writing, customer support, and code generation	2
Total		30hrs

RESOURCE PERSON

Ms. Shalaka Tyagi is currently working as Assistant Professor in the School of Computer Science and Applications. She has a total experience of more than 4 years in teaching and 3+ years in corporate. She is associated with Sharda University since 2024. Before Sharda University she has worked with Galgotias University and IP university. She is double post graduate in MBA and M.tech both. She has been awarded MBA from Cardiff University, United Kingdom. She did M.Tech (CSE) from K. R. Mangalam University, Gurugram, Haryana. She is an encouraging educator with an ability to make engineering and management interesting for students. She is a passionate educator who offers the required motivation and inculcates habits to make students independent.

Mr. Vishvendra Pal Singh Nagar is an accomplished IT professional with extensive experience in software engineering, IT management, and automation across diverse industries. Over the years, he has contributed to organizations such as Extramarks.com, Havells India, Packet Shaper Technology, Vhigh Technologies, A2Z Message Solution, UIL Electronics India, and P.S. Electricals, where he has handled responsibilities ranging from server administration and web service deployment to automation of electrical panels and security program development. His expertise spans automation, microcontroller programming, firmware development, IoT and networking, web development, and robotics, making him adept at delivering innovative technological solutions and managing complex IT environments.

Ms. Megha Mittal is Working as Assistant Professor at Sharda University. She is MCA graduate from Sharda University, with a strong foundation in DBMS, SQL, Artificial Intelligence and Machine Learning. Her experience includes AI/data-analytics internships at Quality Austria Central Asia and Codsoft, along with academic projects in AI chatbots, hotel reservation systems, and data visualization dashboards.

Dr. Neeru Singh is currently working as an Associate Professor in the Department of Computer Science and Applications. She has extensive experience in teaching, research, and academic administration in the field of Computer Science. She is associated with Sharda University and is actively involved in delivering quality education while mentoring students in emerging technologies. Her areas of interest include Artificial Intelligence, Machine Learning, Data Analytics, Generative AI, Augmented Reality, Database Management Systems, and Big Data Analytics. She has published research papers in reputed journals and conferences and has guided students in academic projects and technical innovations. She is passionate about integrating modern technologies into teaching and believes in creating an engaging, practical, and student-centric learning environment.

School : SSCSE

Programme: B.Tech. IT, BCA(Core/AI ML/CCIoT/Cyber Security)

B.Sc. (CS/IT/AI ML/CCIoT/ Cyber Security)

Batch: 2025-29, 205-28

Current Academic Year: 2026-27

Semester: III

1. Course Code	NVI0101		
2. Course Title	Introduction to Prompt Engineering		
3. Credits	Non-Credit		
4. Contact Hours (L-T-P)	30 Hours		
Course Type	Value added course		
5. Course Objective	To introduce students to foundational AI concepts, focusing on practical skills in prompt engineering, digital persona creation, and data analysis applicable to diverse domains such as creative industries, healthcare, and education.		
6. Course Outcomes	CO1: Understand foundational concepts of Generative AI, including key models, applications, and ethical considerations. CO2: Develop and apply prompt engineering techniques for AI-driven solutions in real-world scenarios. CO3: Enhance personal branding and digital presence using AI tools. CO4: Analyze and visualize data using Excel and other tools to derive actionable insights. CO5: Explore domain-specific AI applications and emerging trends in the field.		
7. Course Description	This course provides a comprehensive introduction to Generative AI and its applications in multiple domains. Students will gain hands-on experience in prompt engineering, personal branding, and data analysis, with a focus on understanding ethical implications and future trends.		
8. Outline syllabus			Duration Hours
Unit 1	Foundations of Generative AI		
A	Introduction to Generative AI		CO1
B	Key Concepts in Generative AI		CO1
C	Applications of Generative AI		CO1,CO4
Unit 2	Advanced Prompting Techniques		
A	Contextual prompts: incorporating context to enhance performance		CO2
B	Dynamic and adaptive prompts: creating flexible and responsive prompts		CO2
C	Evaluation and iteration: methods for evaluating and improving prompts		CO2, CO3
Unit 3	Writing Essentials and Digital Persona Creation		
A	Writing Essentials: Boosting Skills with AI		CO1,CO3
B	Understanding Digital Personas		CO3
C	Portfolio Development		CO3
Unit 4	AI-Assisted Research and Data Analysis		
A	Excel Basics for Data Analysis		CO2
B	Advanced Excel Techniques		CO2
C	Google App Script for Automation		CO4
Unit 5	Domain-Specific Applications and Future Trends		
A	Using prompts in real-world scenarios: case studies and hands-on exercises		CO4
B	Ethical considerations in prompt engineering: bias detection and mitigation		CO5
C	Special applications: creative writing, customer support, and code generation		CO5
Mode of Examination	Assignments/Quizzes/Presentation/Group discussion		
Weightage Distribution	CA	MTE	ETE
	100%	0	0
Text book/s*	1. Artificial Intelligence: A Modern Approach by Stuart Russell and Peter Norvig 2. Machine Learning by Tom M. Mitchell 3. Speech and Language Processing by Daniel Jurafsky and James H. Martin The Art of Prompt Engineering with ChatGPT: A Hands-on Guide (learn AI Tools the Fun Way!) by Nathan Hunter		