





3 Years | Undergraduate Skill-Based Vocational Program | Bachelor of Vocation

# **B.Voc. in User Interface and Interaction Engineering**



## FOR FURTHER INFORMATION

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## USER INTERFACE AND INTERACTION ENGINEERING

Good user interface design is a critical part of the success of a product or website. The vision of this course is to create designers who will be able to design and develop desirable and useable user interfaces and interaction designs for products and services that enhance the overall user experience.

#### ELIGIBILITY

Published on the admissions page of the Srishti Manipal website.

#### **MEDIUM OF INSTRUCTION**

English; all our transactions and transcripts will be in English.

#### **DURATION**

6 semesters (3 years); based on the National Skills Qualification Framework (levels 4, 5, 6, 7).

#### **MODES OF DELIVERY**

**THEORY** Master classes, appreciation, lecture-demos, readings

**TUTORIALS** Learning by working on given tasks, interjected with short periods of instruction/demonstration to learn specific techniques or ideas

**MASTER CLASSES** Interactions that could be face-to-face, on Skype or as webinars

**PRACTICAL** Studio settings where students will use techniques and concepts they have learnt to facilitate making, doing and thinking. This learning mode is envisioned as a space for experimenting, synthesizing knowledge and practices through immersive engagement, intuition, contextual learning, design processes and creative methodologies

**FOCUSED AREA STUDY** Specialized learning in a specific aspect of a discipline that has a direct skill based industrial input. Core skills are amplified based on cutting edge industry trends as crystallized through the round table and the mentor labs

**SELF-STUDY SESSIONS** Sessions where documentation, online resources and forums are used to learn specific topics- this could include taking short online courses (when such are available) and working on open-source projects **PORTFOLIO** Building of a curated collection of work

**PRACTICUM** Work based learning experience

**PROJECTS** Punctuations in a semester, requiring students to work individually or collaboratively towards a real or simulated design brief

**SEMINAR** Students work towards the articulation of a position on the one hand and being sensitive to the position of the other. Seminar is a mode where learners explore a curated - theme, technology, method or innovation through guided interaction with industry experts, professionals or students themselves, in a collaborative mode

**ROUND TABLE** Brings in experts from the industry as keynote speakers, in addition to students who have come in fresh from industry apprenticeship, to create a reflection on how the industry and institution collaborate in order to produce vocation specific learning

**MENTOR LABS** Non-prescriptive by nature, mentors labs enable rather than instruct in different areas such as technical knowhow, innovation and design, leadership and motivation, business and entrepreneurship

**INDUSTRY EXPOSURE** Facilitate building networks and keeping abreast with the developments that are constantly occurring in industry – field visits, trade shows, festivals, symposiums, seminars conferences

**APPRENTICESHIP** Involves working in a professionally mentored environment under a practitioner from the industry such as a master craftsman, designer or artist

**CAPSTONE PROJECT** A compulsory industrybased project situated in a real world production pipeline, focusing on developing industry standard solutions. Students will apply their skills and learning in research, design process, ideation, prototyping, making and testing.

CURRICULUM COMPONENTS	SEMESTER
Theory	1, 2, 3, 4, 5
Tutorial	1, 2, 3, 4, 5
Master Class	1, 2, 3, 4, 5
Practical	1, 2, 3, 4, 5, 6
Self-Study	1, 2, 3, 4, 5, 6
Seminar	2, 4
Focused Area Study	5
Projects	1, 2, 3
Mentor Lab	5
Portfolio	1, 2, 3, 5
Language	1, 2, 3, 4, 5
Electives	1, 2, 3, 4
Holistic Education	1, 2, 3, 4
Practicum	1, 2, 3, 4, 5, 6
Industry Exposure	2
Apprenticeship	4
Capstone	6

#### COMMON LEARNING UNITS

YEAR 1		YEAR 2		YEAR 3	
SMVPC01	Elective - 1	SMVPC11	Elective - 3	SMVPC21	Language - 5
SMVPC03	Language - 1	SMVPC13	Language - 3	SMVPC23	FAS - 5
SMVPC05	Project - 1	SMVPC15	Project - 3	SMVPC25	Mentor Lab - 5
SMVPC07	Industry Exposure - 1	SMVPC17	Apprenticeship - 3	SMVPE05	Portfolio - 5
SMVPC09	Holistic Education - 1	SMVPC19	Holistic Education - 3	SMVPC22	Language - 6
SMVPE01	Portfolio - 1	SMVPE03	Portfolio - 3	SMVPC24	FAS - 6
SMVPC02	Elective - 2	SMVPC12	Elective - 4	SMVPC26	Mentor Lab - 6
SMVPC04	Language - 2	SMVPC14	Language - 4	SMVPE06	Portfolio - 6
SMVPC06	Project - 2	SMVPC16	Project - 4	SMVCAP6	Capstone
SMVPC08	Industry Exposure - 2	SMVPC18	Apprenticeship - 4		
SMVPC10	Holistic Education - 2	SMVPC20	Holistic Education - 4		
SMVPE02	Portfolio - 2	SMVPE04	Portfolio - 4		
SMVPS02	Seminar	SMVPS04	Seminar		

## **COURSE AIMS AND OBJECTIVES**

The User Interface and Interaction Engineering (UIIE) program aims to offer skills and tools, and industry exposure that will enable students to become exceptional user interface design and developers. Specifically each student is led and supported:

- >> To develop understanding, competencies, and skills required to create and develop exceptional user interface & interaction design.
- To seamlessly integrate with the industry contexts through periodic industrial exposure and experiences throughout the program.



### USER INTERFACE AND INTERACTION ENGINEERING

The UIIE for Screen & Web Pathway is envisioned to create individuals with the skills and knowledge to design and develop immersive and engaging digital experiences, and equip them to effectively engage, inform and shape the rapidly evolving digital industry in India. The space would be conducive to explore opportunities and implications of designing for screen-based interactions and probe into the emerging complex technological infrastructure that is increasingly driving such interactions, namely big data, machine learning and advanced algorithms. Through the many immersive studios and workshops along with hands on experience of working with the industry on real life projects, they acquire the fundamentals of the human centred approach to interface and interaction design, while acquiring the necessary skills to transform innovative concepts into real products and experiences.

LEARNING	UNITS	EXIT CRITERIA		
YEAR 1		At the end of year 1 students will:		
SMCC225	Physical Computing	> Learn efficient and rapid production of high		
SMCC227	Introduction to Spatial Data and Geolocation	fidelity design and prototypes of interfaces for web and mobile using professional		
SMCC229	Introduction to Programming for Mobile Devices	<ul><li>» Gain abilities to design animations and</li></ul>		
SMCC226	Extending Functionality – APIs	transitions, and		
SMCC228	Introduction to Digital Fabrication	>> Develop basic programming abilities.		
SMCC230	Working with Sound			
SMCC232	Cross Platform Game Design and Development			
YEAR 2	·	At the end of year 2 students will:		
SMUI201	Testing Interactions	» Develop professional level abilities of performin		
SMUI203	Programming for Interactions	the role of a designer across the multiple job		
SMUI205	Working with Datasets	engineer, motion designer, data visualizer, UI		
SMUI207	Data and Visualisation	designer, front end programmer, etc.		
SMUI202	Responsible Design in Practice	>> Learn to test interactions, work with		
SMUI204	Advanced IxD	programming.		
		<ul> <li>Develop individual job role through working on an industry brief to produce and efficiently contribute to a particular production chain.</li> </ul>		
YEAR 3		At the end of year 3 students will:		
SMVCAP6	Capstone	<ul> <li>Work with the industry in a context of the student's choice so as to gain an in-depth working proficiency of contributing to the production of exceptional interfaces for the web.</li> </ul>		
		Learn to work with industry to potentially induct into the ready workforce.		











Images courtesy Srishti Institute of Art, Design & Technology

#### For more information on the programs and courses

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