



Deccan Education Society's
FERGUSSON COLLEGE, PUNE
(AUTONOMOUS)

Learning Outcomes-Based Curriculum

SYLLABUS

for

(S. Y. B. Voc. Interior Design)

(Semester- III)

For Academic year
2024-2025

As per NEP-2020

Program Outcomes (POs) for B. Sc.

PO1	<p>Disciplinary Knowledge: (i) Demonstrate comprehensive knowledge of one or more discipline that form a part of an undergraduate B.Voc programme (ii) Execute strong theoretical and practical understanding generated from the chosen B.Voc programme.</p>
PO2	<p>Critical Thinking and Problem solving: Exhibit the skill of critical Design thinking and use them to predict a range of creative solutions towards a Design problem, evaluate them and chose the most appropriate options.</p>
PO3	<p>Social competence: (i) Exhibit thoughts and ideas effectively in writing and orally; communicate with others using appropriate media, build effective interactive and presenting skills to meet global competencies. (ii) Able to connect to people individually or in group settings.</p>
PO4	<p>Research-related skills and Scientific temper: (i) Demonstrate a sense of inquiry and capability for asking relevant/appropriate questions; ability to plan, execute and report the results of an experiment (ii) Employ knowledge of the avenues for research and higher academic achievements in the chosen field and allied subjects and aware about research ethics, intellectual property rights and issues of plagiarism.</p>
PO5	<p>Trans-disciplinary knowledge: Create new conceptual, theoretical, methodological innovations that integrates and transcends beyond discipline-specific approaches to address a common problem</p>
PO6	<p>Personal and professional competence: (i) Able to actively work individually and participates in team activities and demonstrates co-operation. (ii) Integrate enthusiasm and commitment to improve personal and team performance levels and build skills to achieve the goals.</p>
PO7	<p>Effective Citizenship and Ethics: Demonstrate empathetic social concern and equity centred national development; ability to act with an informed awareness of moral and ethical issues and commit to professional ethics and responsibility.</p>
PO8	<p>Environment and Sustainability: Understand the impact of the scientific solutions in societal and environmental contexts and demonstrate the knowledge of, and need for sustainable development.</p>
PO9	<p>Self-directed and Life-long learning: Acquire the ability to engage in independent and life-long learning in the broadest context of socio-technological changes.</p>

PSO No.	Program Specific Outcomes (PSOs) Upon completion of this programme the student will be able to
PSO1	Academic competence: i) Identify fundamental concepts of manual and computer designing, drafting and Practical application. (ii) Understand the working of the business venture in terms of consultancy, execution, costing, retailing and marketing. (iii) Classify various materials, using identification and testing methods.(iv) Demonstrate 2D,3D Presentation, Execution
PSO2	Personal and Professional Competence: (i) Review the latest market conditions, contemporary design trend, updated materials (ii) Design the commercial & residential interior projects using the advanced knowledge of materials ,construction techniques & software.
PSO3	Research Competence: (i) Analyze the work of Indian and international designers also the historical database of the living styles & interior around the world to take the inspiration, for development of their own themes.(ii) Plan and Execute the theme-based personnel ,Corporates or Government ventures.
PSO4	Entrepreneurial and Social competence: i) Apply competencies including communication and presentation skills orator and listening skills; along with the skill set to work in a team as well as an individual (ii) Create a awareness through their work by using products which are green and harmless for the society.

**Proposed Structure,Subjects with codes & credits in B.Voc Interior Design .
First Year – Semester III**

Semester	Paper Code	Paper Title	Credits
III	BID-200 (Major)	Commercial – Small Scale Projects-Practical (P)	2
	BID-201 (Major)	Rate Analysis-Theory(T)	4
	BID-202 (Major)	Commercial Material-Theory(T)	2
	BID-211 (Minor)	Commercial Services-Theory(T)	2
	BID-212 (Minor)	Basic 3D Techniques- Practical (P)	2
	BID-220 (OE)	Office management(T)	2
	BID-230 (VSC)	CAD Residential-Theory but Practical (T)	2
	BID -245 (CEP)	Green Interior Awareness-Theory but Practical (T)	2

Teaching and Evaluation (Only for FORMAL education courses)

Course Credits	No. of Hours per Semester Theory/Practical	No. of Hours per Week Theory/Practical	Maximum Marks	CE 40 %	ESE 60%
1	15 / 30	1 / 2	25	10	15
2	30 / 60	2 / 4	50	20	30
3	45 / 90	3 / 6	75	30	45
4	60 / 120	4 / 8	100	40	60

Eligibility: As per the rules and regulations of Savitribai Phule Pune University (SPPU)

BID 200- Commercial – Small Scale Projects

Name of Programme	B.Voc. in INTERIOR DESIGN
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Title of the Course	Commercial – Small Scale Projects (PRACTICAL)		
Course Code	BID 200		
Number of Credits	2		
	Description	Cognitive level (Bloom's Level 1/2/3/4/5/6)	
	Student will be able to		
CO1	Classify the complete commercial Interior design projects of small scale with all its details from concept to the 3d.	3	
CO 2	Examine the commercial Interior design projects of small scale with all its drawing details from concept to the 3d view.	3	
CO3	Analyze the commercial Interior design projects of small scale with all its drawing details from concept to the 3d view.	4	
CO4	Explain the commercial Interior design projects of small scale with all its drawing details from concept to the 3d view.	4	

PAPER I

PAPER CODE - BID 200(PRACTICAL)

CREDITS - 2 Credits

UNITS	UNITS DETAILS	NO OF LECTURES
Unit -I	PROJECT NO 1 -300 SFT 1. Data collection 2. Furniture layout (Alternative 1) 3. Furniture layout (Alternative 2) (Final layout with small correction) 4. Mood board 5. False ceiling layout (with strip section, min 1) 6. Electrification sheet (CP, WP+SB, AC, SB details) 7. Section AA & BB (wall treatment) 8. Exterior Elevation 9. Furniture design 10. Material selection palate 11. Two-point P.V (Interior & Exterior) 12. Presentation plan	20
Unit -II	PROJECT NO 2 -500 SFT 1. Data collection 2. Furniture layout (Alternative 1) 3. Furniture layout (Alternative 2) (Final layout with small correction) 4. Mood board 5. False ceiling layout (with strip section, min 1) 6. Electrification sheet (CP, WP+SB, AC, SB details) 7. Section AA & BB (wall treatment) 8. Exterior Elevation 9. Furniture design 10. Material selection palate 11. Two-point P.V (Interior & Exterior) 12. Presentation plan	20
Unit -III	PROJECT NO 4 -1000SFT 1. Data collection 2. Furniture layout (Alternative 1) 3. Furniture layout (Alternative 2) (Final layout with small correction) 4. Mood board 5. False ceiling layout (with strip section, min 1) 6. Electrification sheet (CP, WP+SB, AC, SB details) 7. Section AA & BB (wall treatment) 8. Exterior Elevation 9. Furniture design 10. Material selection palate 11. Two-point P.V (Interior & Exterior) 12. Presentation plan	20

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Reference Books : 1. Interior Designing Drawing By Alan Huges

BID 201- Rate Analysis-Theory(T)

Name of Programme	B Voc in INTERIOR DESIGN	
Title of the Course	Rate Analysis-Theory(T)	
Course Code	BID 201	
Number of Credits	4	
	Description	Cognitive level (Bloom's Level1/2/3/4/5/6)
	Student will be able to	
CO1	Calculate the cost of various furniture items commonly used in interior design projects.	3
CO2	Carry Out rate analysis to identify cost drivers and potential cost saving opportunities within interior design projects.	3
CO3	Integrate rate analysis findings into comprehensive interior design proposals, demonstrating an understanding of budgetary constraints and financial considerations	4
CO4	Analyse the impact of market trends and economic factors on furniture pricing, demonstrating a nuanced understanding of the dynamic nature of pricing in the Interior design industry.	4

PAPER I**PAPER CODE - BID 201(THEORY)****CREDITS - 4 Credits**

UNITS	UNITS DETAILS	NO OF LECTURES
Unit -I	RATE ANALYSIS OF A PARTITION 0. Units & Conversions. 1.Drawings with dimensions 2.Measurements sheet 3.Abstract sheet 4.Rate per unit calculation	15
Unit -II	RATE ANALYSIS OF A WARDROBE 0. Units & Conversions. 1.Drawings with dimensions 2.Measurements sheet 3.Abstract sheet 4.Rate per unit calculation	15
Unit -III	RATE ANALYSIS OF A TABLE 0. Units & Conversions. 1.Drawings with dimensions 2.Measurements sheet 3.Abstract sheet 4.Rate per unit calculation	15
Unit -IV	RATE ANALYSIS OF A FLOORING 0. Units & Conversions. 1.Drawings with dimensions 2.Measurements sheet 3.Abstract sheet 4.Rate per unit calculation	15

Reference Books:

- 1) Cost Estimating for Interior Designers, by Christine Piotrowski.
- 2) Estimating for Interior Designers, by Diana Alison.

BID 202 – Commercial Materials –Theory (T)

Name of Programme	B Voc in INTERIOR DESIGN	
Title of the Course	Commercial Materials (THEORY)	
Course Code	BID 202	
Number of Credits	2	
	Description	Cognitive level (Bloom's Level1/2/3/4/5/6)
	Student will be able to	
CO1	Examine the partition and furniture fittings with their types and materials.	3
CO2	Classify finishing materials and False ceiling as per their materials and requirements.	3
CO3	Identify the Industrial Antibacterial paints with its properties and the usage as per the need.	4
CO4	Analyse the structural glazing with its usage and properties.	4

PAPER IV**PAPER CODE - BID 202(THEORY)****CREDITS - 2 Credits**

UNITS	DETAILS	NO OF LECTURES
Unit -I	1. TYPES OF PARTITIONS	5
Unit -II	2.FURNITURE FITTINGS	5
Unit -III	3. FINISHING MAERIALS	5
Unit -IV	4. MODULAR FALSE CEILING	5
Unit -V	5. INDUSTRIAL & ANTI BACTERIAL PAINT	5
Unit- VI	6. STRUCTURAL GLAZING & ACP	5
Reference Books :		
1) Interior Design materials and specification ,by Lisa Godsey		
2) Materials for nterior Enviornments		

BID 211 -Commercial Services –Theory (T)

Name of Programme	B Voc in INTERIOR DESIGN	
Title of the Course	Commercial Services (THEORY)	
Course Code	BID 211	
Number of Credits	2	
	Description	Cognitive level (Bloom's Level1/2/3/4/5/6)
	Student will be able to	
CO1	Demonstrate advanced understanding and application of electrical principles, including circuit analysis, component selection, and power distribution systems.	3
CO2	Communicate effectively with clients, architects, engineers, and construction teams to coordinate plumbing projects and ensure compliance with project requirements and specifications.	3
CO3	Apply specialized knowledge and skills to design, implement, and manage sanitation systems for diverse settings in Interior Projects.	4
CO4	Collaborate effectively with architects, interior designers, mechanical engineers, and other stakeholders to integrate air conditioning solutions seamlessly into interior design concepts, ensuring aesthetic harmony, spatial efficiency, and environmental sustainability.	4

PAPER V**PAPER CODE - BID 211****CREDITS - 2 Credits**

UNITS	DETAILS	NO OF LECTURES
Unit -I	ELECTRIFICATION for Commercial Spaces	12
Unit -II	PLUMBING & SANITATION for Commercial Spaces	12
Unit - III	AIR CONDITIONING for Commercial Spaces	06
Reference Book – 1) HVAC Design Sourcebook by W.Larsen Angel. 2.Electrical Installation Designs by Bill Atkinsonand Roger Levegrove		

Name of
Programme

B.Voc. in INTERIOR DESIGN

Title of the Course	Basic 3D Techniques	
Course Code	BID 212	
Number of Credits	2	
	Description	Cognitive level (Bloom's Level 1/2/3/4/5/6)
CO1	Student will be able to Apply various modeling techniques in 3Ds Max and SketchUp to create complex 3D models	3
CO2	Examine the texture & materials to 3D models in 3DS Max and SketchUp ,utilizing mapping techniques and material properties	3
CO3	Analyze the best modeling approach for different types of objects, considering factors such as polygon count,topology,and surface smoothness,to optimize model efficiency and realism.	4
CO4	Compare visual impact of different materials and textures on rendered scenes, considering factors such as reflectivity, transparency and surface details to achieve desired asthetics effects.	4

BID 212 - Basic 3D Techniques

PAPER VI

PAPER CODE - BID 212

CREDITS - 2 Credits

UNITS	UNITS DETAILS	NO OF LECTURES
Unit -I	INTRODUCTION	3
Unit -II	COMMAND PRACTICE	6
Unit -III	SMALL OBJECT MODELLING	6
Unit -IV	FURNITURE OBJECT MAKING	6
Unit -V	INTERIOR SPACE 3D MODELLING	9

Reference books –

- 1) 3D Max 2022 by Prof. Sham Tickoo
- 2) Sketch up 2022 Hands-on Basics and Advanced Exercises by Tutorial Books.
- 3) Sketch up to Layout by Matt Donley.

BID 220 –OE –Office Management

Name of Programme	B.Voc. in INTERIOR DESIGN	
Title of the Course	Office Management	
Course Code	BID 220	
	Description	Cognitive level (Bloom's Level 1/2/3/4/5/6)
	Student will be able to	
CO1	Apply effective communication techniques to interact with clients, understanding their needs, preferences, and project requirements.	3
CO2	Execute the knowledge of relevant laws, regulations, and ethical standards to address legal and ethical issues in interior design practice, such as licensing requirements, contracts, and professional conduct.	3
CO3	Analyze client feedback and communication dynamics to identify opportunities for enhancing client relationships, resolving conflicts, and fostering trust and satisfaction throughout the design process.	4
CO4	Identify project management methodologies and tools, analyzing their effectiveness in optimizing project workflows, minimizing risks, and achieving project goals within constraints.	4

PAPER VII**PAPER CODE - BID 220****CREDITS - 2 Credits**

UNITS	UNITS DETAILS	NO OF LECTURES
Unit -I	<ol style="list-style-type: none">1. Introduction to Office Management and Entrepreneurship2. Characteristics of Successful Entrepreneurs3. Organizational Structure and Business Models4. Office Space Planning and Layout Design for Startups5. Communication Strategies for Entrepreneurs6. Effective Time Management Techniques7. Financial Planning and Budgeting for New Ventures8. Funding Options for Startups: Bootstrapping, Venture Capital, and Angel Investment9. Legal Considerations for Entrepreneurs: Business Structures and Intellectual Property10. Marketing Fundamentals for Small Businesses11. Branding and Positioning Strategies12. Digital Marketing Essentials: Website Development, SEO, and Social Media13. Sales Strategies and Customer Relationship Management14. Market Research and Competitive Analysis15. Product Development and Innovation16. Business Plan Development and Pitching17. Entrepreneurial Leadership and Team Building18. Risk Management and Contingency Planning19. Financial Management for Growing Ventures20. Scaling Up: Expansion Strategies and Franchising21. Networking and Relationship Building22. Negotiation Skills for Entrepreneurs23. Managing Change and Adaptability24. Social Responsibility and Sustainable Practices in Entrepreneurship25. Entrepreneurial Mindset: Creativity and Problem-Solving26. Emotional Intelligence and Resilience27. Failure and Learning from Setbacks28. Succession Planning and Exit Strategies29. Reflections on Entrepreneurial Journey30. Final Business Plan Presentation	30

Reference Book –

1) Office MANAGEMENT:Principles And Practices By Susan J. Young

BID 230- VSC- CAD –Residential (Theory)

Name of Programme	B.Voc. in INTERIOR DESIGN		
Title of the Course	VSC- CAD –Residential (Theory/Practical)		
Course Code	BID 230		
Number of Credits	2		
	Description	Cognitive level (Bloom's Level 1/2/3/4/5/6)	
	Student will be able to		
CO1	Classify the complete Residential Interior design projects of small scale with all its details `	3	
CO 2	Examine the Residential Interior design projects of small scale with all its drawing details from concept to the 3d view.	3	
CO3	Analyze the commercial Interior design projects of small scale with all its drawing details.	4	
CO4	Explain the commercial Interior design projects of small scale with all its drawing details from concept to the 3d view.	4	

PAPER I		
PAPER CODE - BID 230(THEORY/PRACTICAL)		
CREDITS - 2 Credits		
UNITS	UNITS DETAILS	NO OF LECTURES
Unit -I	PROJECT NO 1 –Residential -2BHK 1. Furniture layout (Alternative 1) 2. Furniture layout (Alternative 2) (Final layout with small correction) 3. False ceiling layout (with strip section, min 1) 4. Electrification sheet (CP, WP+SB, AC, SB details) 5. Section AA & BB (wall treatment) 6. Exterior Elevation 7. Furniture design 8. Presentation plan	20

Unit -II	PROJECT NO 2 –Bungalow 1. Furniture layout (Alternative 1) 2. Furniture layout (Alternative 2) (Final layout with small correction) 3. False ceiling layout (with strip section, min 1) 4. Electrification sheet (CP, WP+SB, AC, SB details) 5. Section AA & BB (wall treatment) 6. Exterior Elevation 7. Furniture design 8. Presentation plan	20
Unit -III	PROJECT NO 3 -300 sft Commercial space 1. Furniture layout (Alternative 1) 2. Furniture layout (Alternative 2) (Final layout with small correction) 3. False ceiling layout (with strip section, min 1) 4. Electrification sheet (CP, WP+SB, AC, SB details) 5. Section AA & BB (wall treatment) 6. Exterior Elevation 7. Furniture design 8. Presentation plan	20

Reference Books :

1. Residential Design using AutoCAD By Daniel John Stine

CEP-245 - Green Interior Awareness -2 Credits

Introduction:

Higher Educational Institutions (HEIs) can play an important role to achieve the objectives of socio-economic development of New India through their active community engagement. This approach will also contribute to improve the quality of both teaching and research in HEIs as they will develop a better understanding of issues in the society. There is a need to focus on improving societal linkages and enabling students to become socially productive [1].

The **goals** of ‘fostering social responsibility and community engagement’ comprise of:

1. Improving the quality of teaching/learning, by bridging the gap between theory and practice through community engagement;
2. Promoting deeper interactions between higher educational institutions and local communities for identification and solution of real-life problems faced by the communities in a spirit of mutual benefit;
3. Facilitating partnerships between local communities and institutions of higher education so that students and teachers can learn from local knowledge and wisdom;
4. Engaging higher education institutions with local communities in order to make curriculum, courses and pedagogies more appropriate to achieve the goals of national development;
5. Catalysing acquisition of values of public service and active citizenship amongst students and youth, which would also encourage, nurture and harness the natural idealism of youth;
6. Undertaking research projects in partnership with local community through community-based research methods.

Forms of Community Engagement

a) Linking learning with community service

In this approach, students and teachers apply their knowledge and skills in a chosen community to improve the lives of people in that community. This can be achieved through the model of ‘service-learning’ (a globally accepted best practice), providing engagement opportunities to students from various disciplines and courses to apply their knowledge to address the challenges of a specific community. For example, students of chemistry can conduct water and soil testing in local areas and share the results with the local community.

b) Linking research with community knowledge

In this approach, various faculties and programmes of HEIs devise joint research projects in partnership with the communities and local agencies. The community’s own knowledge is integrated into the design and conduct of the research. New research by students helps them to complete their academic requirements, and at the same time the community’s knowledge is systematized. Community-based Participatory Research (CBPR) approaches are gaining recognition in this regard.

Students of engineering, for example, can undertake research in partnership with the community on solid and liquid waste disposal.

c) Knowledge sharing and knowledge mobilization

The knowledge available with students and teachers in various disciplines is made available to the local community to realize its developmental aspirations, secure its entitlements and access its benefits from various agencies and schemes. These can take the forms of enumerations, surveys, awareness camps and campaigns, training, learning manuals/films, maps, study reports, public hearings, policy briefs, cleanliness and hygiene teachings, legal aid clinics, etc. For example, students can undertake a 'swachhta survekshana' and/or nutrition survey for mothers and children, and educate them about hygiene and nutrition.

d) Devising new curriculum and courses

Many institutions of higher education develop new curricula in existing courses as well as design new courses to engage with the community. This enriches the curriculum of existing courses through locally-appropriate subject matter. It also creates new, locally appropriate educational programmes that interest a new generation of students. For example, new courses on financial inclusion, entrepreneurship development and nutritional value of local produce can improve knowledge and business opportunities for students.

e) Including practitioners as teachers

Local community elders, women leaders, tribals, entrepreneurs and civil society practitioners have enormous practical knowledge of a wide variety of issues—from agriculture and forestry to child-rearing, micro-planning, water-harvesting and project management. This expertise can be tapped by inviting such practitioners to co-teach courses both in the classrooms and in the field. Such instructors should be duly recognized, compensated and respected for their practical experience and knowledge.

f) Social innovations by students

The students can be encouraged to initiate learning projects with a social impact and supported by HEIs. Incubation of such social innovation projects by students can also have meaningful links to existing curriculum and courses. Some competitions for social innovation are being organized by some HEIs; they should be integrated into the curriculum.

Community Engagement and Social Responsibility (CESR) Course

The Community Engagement and Social Responsibility course is an immersive and transformative learning experience designed for second-year undergraduate students. In an era where the intersections of diverse disciplines are more critical than ever, this course stands at the forefront of transdisciplinary and multidisciplinary education. As the heartbeat of societal progress, this compulsory course seeks to connect students with their communities, fostering a deep sense of social responsibility. Rooted in the belief that academic knowledge should transcend classroom walls, the aim is to equip students with the tools to analyse, comprehend, and address pressing social issues. Through dynamic and interactive learning methods, students will not only explore the complexities of community dynamics but also actively contribute to the development of sustainable solutions.

General guidelines -

1. The implementation mechanism of CESR Course is to be decided by respective departments.
2. Each department should ensure collaborations/Tie-ups (in terms of MoU/LoI) with relevant industries/organizations/NGOs as per project requirements.
3. Expertise of Local community elders, women leaders, tribals, entrepreneurs and civil society practitioners can be tapped by inviting them to co-teach courses both in the classrooms and in the field. Such instructors should be duly recognized, compensated and respected for their practical experience and knowledge.
4. The CESR course has to be implemented ONLY through the department. Students cannot approach NGOs /Organisations individually for the same. All the communication to the NGOs/Organizations should be done through the department.
5. Departments should maintain the relevant documents (such as attendance records, proposals, CESR diary, MoUs/LoI etc) and correspondence regarding CESR course.

Objectives:

1. CESR Theory

- a) To develop an understanding of community needs and challenges.
- b) To equip students with skills to identify problem areas within the community.
- c) To guide students in creating effective project proposals.
- d) To apply classroom knowledge of courses to field realities and thereby improve the quality of learning.

2. CESR Field Work:

- a) To provide practical experience in implementing community projects.
- b) To assess students' ability to apply theoretical knowledge in real-world situations.
- c) To develop skills in project management, teamwork, and communication.

***Course outcomes should be designed at departmental level in alignment with above course objectives**

Course structure

CEP-245	Foundations of Community Engagement	[Credits-2]
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- As per the NEP guidelines, the UG students are expected to complete this program in their **third semester** from the academic year 2024-25.
- The academic schedule must be planned by the departments, 1 credit to be allotted to classroom and tutorials (15 hours) and 1 credit to field engagement – students learning hours (30 hours)
- **Classroom Engagement and Field Engagement:**
2 credits of classroom engagement and field Engagement comprises of following components:
 - Understanding Community Needs
 - Identifying Project Opportunities
 - Crafting and Finalising Effective Project Proposals
 - Lectures on community sociology and challenges.
 - Case studies and discussions on successful community engagement projects.

CEP-245	Foundations of Community Engagement	[Credits-2]
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Community engagement –Basics (1 Credit)	
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Topics Covered	Activities
Introduction to Community Engagement	- Overview of theories and models - Importance of interdisciplinary approaches
Social Issues Analysis	- Guest lecture by a social scientist or experts from diverse sectors - Group discussion and analysis of contemporary social issues
Community Needs Assessment	- Theory on needs assessment methodologies - Field visit for practical application
Stakeholder Engagement	- Guest lecture from a community organizer - Simulated stakeholder engagement role-play

Community engagement –Field Work (1 Credit)	
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Topics Covered	Activities
Cultural Competence in Community Work	- Cultural sensitivity training - Case studies on community engagement
Writing Project Proposal and finance resource management	- Develop a community project proposal and finance resource management - Timeline for implementation
Field Work Skills Training	- Training in data collection, interviewing, and observation - Practical exercises in the community
Ethical Considerations in Community Engagement	- Guest lecture on ethical dilemmas in community work - Case studies and group discussions

	Credit	Contact/ learning Hours	Course component
Sem III	1	15 hrs.	Classroom engagement and tutorials
	1	30 (student learning hrs.)	Field Engagement (Requirement Gathering)

Note: Class engagement: 1 Credit = 1 Hour

For field engagement/ Field Project: 1 Credit = 2 Hours

Evaluation of Classroom Engagement and Field Engagement (Sem. III)

Evaluate each student for 50 marks per semester at department level –

- 20 marks for Continuous evaluation (CE)
 - Participation in class activities and discussions.
 - Submission of reflective essays.
- 30 marks for End Semester Examination (ESE)
 - Based on evaluation of Project Proposal.

Proposed Structure, Subjects with codes & credits in B. Voc. Interior Design.

First Year - Semester IV

Semester	Paper Code	Paper Title	Credits
IV	BID-250 (Major)	Commercial – Large Scale Projects-Practical (P)	2
	BID-251 (Major)	Quantification & Estimation-Theory (T)	4
	BID-252 (Major)	Advanced Commercial Materials- Theory (T)	2
	BID-261 (Minor)	Advanced Commercial Services-Theory (T)	2
	BID-262 (Minor)	Advanced 3D Techniques-Practical (P)	2
	BID-270 (OE)	Professional Practice/Theory(T)	2
	BID-290 (SEC)	CAD Commercial-Theory/ Practical (T)	2
	BID -295 (FP)	Theory / Practical (T)	2

Teaching and Evaluation (Only for FORMAL education courses)

Course Credits	No. of Hours per Semester Theory/Practical	No. of Hours per Week Theory/Practical	Maximum Marks	CE 40 %	ESE 60%
1	15 / 30	1 / 2	25	10	15
2	30 / 60	2 / 4	50	20	30
3	45 / 90	3 / 6	75	30	45
4	60 / 120	4 / 8	100	40	60

Eligibility: As per the rules and regulations of Savitribai Phule Pune University (SPPU)

F.Y.B.Voc Interior Design. Semester IV

BID-250	Commercial-Large Scale Projects (Major)	Credits: 2 Hours: 60
	Course Outcomes (COs) On completion of the course, the students will be able to:	Bloom's Cognitive Level
CO1	Apply and optimize spatial layouts for large-scale commercial interiors, considering factors such as traffic flow, functionality, accessibility, and zoning regulations.	3
CO2	Use expertise in selecting and specifying materials, finishes, and furnishings suitable for large-scale commercial spaces, taking into account durability, sustainability, aesthetic appeal, and budget constraints.	3
CO3	Analyse technical documentation, including detailed drawings, specifications, schedules, and construction documents, to communicate their design concepts effectively to clients, contractors, and other stakeholders, demonstrating creativity, precision, and professional standards in their work..	3
CO4	Arrange advanced design principles and theories to develop innovative and cohesive interior design concepts for large-scale commercial spaces, integrating elements such as lighting, color theory, texture, scale, and proportion to create compelling and functional environments.	4

Project No.	Title of the Project	No. of Lectures
1.	Commercial Project of size 2000 sft .focus on Design	20
2.	Commercial Project of size 2500 sft .focus on Services	20
3.	Commercial Project of size 3000 sft .focus on Design & Services	20

References:

- 1.Commercial Space Vol.1 & 2 by Hong Kong Rihan International Culture.
- 1.Designing Commercial Interiors by Christine M.Piotrowski & Elizabeth A. Rogers.

F.Y.B.Voc Interior Design. Semester III		
BID-251	Quantification & Estimation (Major-Theory)	Credits: 4 Hours: 60
	Course Outcomes (COs) On completion of the course, the students will be able to:	Bloom's Cognitive Level
CO1	Use the ability to quantify materials and resources required for interior design projects accurately.	3
CO2	Examine the competence in estimating project costs, considering factors such as materials, labor, and overheads.	3
CO3	Identify the skills in estimating costs for complex interior design projects, considering variables like sustainability, accessibility, and design intricacies.	4
CO4	Detect professional communication skills for presenting quantification and estimation data to clients, contractors, and other stakeholders in a clear and persuasive manner.	4

Unit	Contents	No. of hours
I	Introduction of Estimation of 2 BHK	3
II	Understanding of Existing Furniture Layout	3
III	Quantification of Dismantling & demolishing of existing work.	6
IV	Quantification of Proposed Civil work	8
V	Quantification of Proposed furniture work	6
VI	Quantification of Proposed False ceiling work	6
VII	Quantification of Proposed Electrical work	8
VIII	Quantification of Proposed painting and polishing work	4
IX	Quantification of Proposed Furnishing & Accessories	4
X	Estimation of complete 2 BHK with the help of all Quantifications	12

References:

1) Estimating for Interior Designers by Diana Alison.

F.Y.B.Voc Interior Design. Semester III

BID-252	Advanced Commercial Materials (Major)(Theory)	Credits: 2 Hours: 30
	Course Outcomes (COs) On completion of the course, the students will be able to:	Bloom's Cognitive Level
CO1	Apply novel material solutions to address specific interior design challenges, demonstrating creativity, critical thinking, and an understanding of material properties and performance.	3
CO2	Experiment with current trends in material usage within the interior design industry, identifying factors driving innovation and influencing design trends.	3
CO3	Analyze and compare various criteria for selecting advanced materials, including aesthetic, functional, economic, and environmental considerations, to make informed design decisions	4
CO4	Integrate advanced materials, such as sustainable or innovative materials, into interior design projects, demonstrating an understanding of their properties and suitability for different applications.	4

Unit	Contents	No. of hours
I	SUN CONTROL FILM	6
II	ECOFRIENDLY MATERIALS	8
III	FLOORING COVERINGS	6
IV	PLASTIC, ACRYLIC & FRP	10

References :

1. Advanced Materials for Interior Design by Russell Gagg.
2. Material Revolution in Interior Design by Petra Schmidt and Kristina Gratzke.

F. Y. B. Voc Interior Design. Semester III		
BID 261	Advanced Commercial Services (Minor)(Theory)	Credits: 2 Hours: 30
Course Outcomes (COs) On completion of the course, the students will be able to:		Bloom's Cognitive Level
CO1	Apply principles of acoustics to design interior spaces that minimize noise pollution, enhance speech intelligibility, and create optimal auditory environments for various commercial settings.	3
CO2	Execute emerging networking technologies and trends, analyzing their impact on interior design practices and business operations, and proposing innovative networking solutions that enhance connectivity, efficiency, and user experience within commercial spaces.	3
CO3	Integrate security system designs into interior spaces, applying knowledge of access control, surveillance, and alarm systems to ensure the safety and security of occupants and assets.	4
CO4	Analyze fire protection strategies in interior design projects, considering factors such as building occupancy, fire load, and evacuation dynamics to evaluate the effectiveness and reliability of fire safety systems and procedures.	4

Unit	Contents	No. of hours
I	1.SECURITY SYSTEMS	8
II	2.ACOUSTICS	6
III	3.FIRE DETECTION & PROTECTION	6
IV	4.NETWORKING	10

References:

1. Building system for Interior Designers by Corky Binggeli.
2. Networking for systems Administrators by Michael W.Lucas.

F.Y.B.Voc Interior Design. Semester III

BID-262	Advanced 3D Techniques (Minor) (Practical)	Credits: 2 Hours: 60
	Course Outcomes (COs) On completion of the course, the students will be able to:	Bloom's Cognitive Level
CO1	Demonstrate proficiency in creating complex 3D models using various modeling techniques in 3ds Max, including polygonal modeling, spline modeling, and modifier-based modeling.	3
CO2	Apply materials, textures, and shaders to 3D models in 3ds Max, utilizing the software's material editor and texture mapping tools to achieve realistic surface appearances and visual effects.	3
CO3	Analyze rendering settings and output in 3ds Max, evaluating their impact on image quality, rendering time, and computational resources, and optimizing settings to achieve desired visual results efficiently.	4
CO4	Compare different modeling workflows and techniques in 3ds Max, analyzing their efficiency, versatility, and suitability for various types of 3D modeling projects.	4

Unit	Contents	No. of hours
I	INTRODUCTION of 3Ds Max software	5
II	COMMAND PRACTICE	15
III	SMALL OBJECT MODELLING	20
IV	FURNITURE OBJECT MAKING	20

References:

1] 3D Max 2022 by Prof. Sham Tickoo

F.Y.B.Voc Interior Design. Semester III		
BID-270	Professional Practice OE-5	Credits: 2 Hours: 30
	Course Outcomes (COs) On completion of the course, the students will be able to:	Bloom's Cognitive Level
CO1	Apply ethical principles and professional standards in interior design practice, demonstrating integrity, honesty, and accountability in their professional conduct and decision-making.	3
CO2	Use effective communication skills for interacting with clients, including active listening, clear verbal and written communication, and presentation techniques to convey design concepts and proposals.	3
CO3	Analyse business practices and models in the interior design industry, analysing financial management, marketing strategies, client acquisition, and project management techniques to develop effective business strategies and foster professional growth.	4
CO4	Identify their professional skills, strengths, and areas for improvement, setting personal and professional goals for ongoing development and lifelong learning in the field of interior design.	4

Expt. No.	Title of the Topics	
1.	Introduction to Professional Practice* - Overview of the course objectives, assignments, and expectations. - Introduction to professional organizations, codes of ethics, and standards in interior design.	3
2.	Communication Skills* - Effective verbal and written communication techniques for client interaction and team collaboration. - Presentation skills for conveying design concepts and proposals.	3
3.	Project Documentation* - Developing project documentation, including design briefs, contracts, proposals, schedules, and budgets. - Legal considerations and liabilities in contract preparation and administration.	3
4.	Digital Tools for Interior Design* - Introduction to CAD software, graphic design tools, project management software, and presentation software. - Hands-on exercises and tutorials for utilizing digital tools in interior design projects.	3
5.	Regulatory Requirements* - Understanding building codes, accessibility standards, zoning regulations, and environmental regulations relevant to interior design projects. - Compliance and risk mitigation strategies in interior design practice.	3

6.	Business Practices* - Financial management principles, including budgeting, pricing strategies, and fee structures. - Marketing strategies, client acquisition, and branding for interior design professionals.	3
7	Legal Considerations* - Overview of legal considerations in interior design practice, including contracts, liability issues, and intellectual property rights. - Case studies and examples of legal challenges in interior design projects.	3
8	Career Development* - Exploring career paths and opportunities in the interior design industry. - Developing personal and professional development goals for ongoing growth and advancement.	3
9	Guest Speaker Session* - Invited guest speakers from the industry share insights and experiences related to professional practice in interior design.	3
10	Final Project Presentation* - Final project presentations, where students demonstrate their understanding of professional practices and principles through a comprehensive project proposal or case study.	3

References:

- 1) Professional Practice for Interior Designer by Christine M.Piotrowski

F.Y.B.Voc Interior Design. Semester II		
BID-290	CAD Commercial (SEC)	Credits: 2 Hours: 60
	Course Outcomes (COs) On completion of the course, the students will be able to:	Bloom's Cognitive Level
CO1	Classify the complete Residential Interior design projects of small scale with all its details`	3
CO2	Examine the Residential Interior design projects of small scale with all its drawing details from concept to the 3d view.	3
CO3	Analyze the commercial Interior design projects of small scale with all its drawing details.	4
CO4	Explain the commercial Interior design projects of small scale with all its drawing details from concept to the 3d view.	4

Expt. No.	Title of the Experiment
1.	PROJECT NO 1 –Commercial Space -2000 sft 1. Furniture layout (Alternative 1) 2. Furniture layout (Alternative 2) (Final layout with small correction) 3. False ceiling layout (with strip section, min 1) 4. Electrification sheet (CP, WP+SB, AC, SB details) 5. Section AA & BB (wall treatment) 6. Exterior Elevation 7. Furniture design 8. Presentation plan
2.	PROJECT NO 2 –Commercial Space -2500 sft 1. Furniture layout (Alternative 1) 2. Furniture layout (Alternative 2) (Final layout with small correction) 3. False ceiling layout (with strip section, min 1) 4. Electrification sheet (CP, WP+SB, AC, SB details) 5. Section AA & BB (wall treatment) 6. Exterior Elevation 7. Furniture design 8. Presentation plan
3.	PROJECT NO 2 –Commercial Space -3000 sft 1. Furniture layout (Alternative 1) 2. Furniture layout (Alternative 2) (Final layout with small correction) 3. False ceiling layout (with strip section, min 1) 4. Electrification sheet (CP, WP+SB, AC, SB details) 5. Section AA & BB (wall treatment) 6. Exterior Elevation 7. Furniture design 8. Presentation plan

Reference Book –

- 1) Residential Design using AutoCAD By Daniel John Stine

FP 295-FP- Green Interior Awareness -2 Credits

FP-295	Community Engagement - Field Project	[Credits-2]
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- As per the NEP guidelines, the UG students are expected to complete this program in their **fourth semester** from the academic year 2024-25.
- 2 credits of **Field Project** comprises of the ways of implementing actual field engagement which needs to be determined by respective departments.

	Credit	Student learning Hours	Course component
Sem IV	2	60 hrs.	Exclusively Field Project

Note: For field engagement/ Field Project: 1 Credit = 2 Hours

Please note that the Following table is to be considered as general guideline and can be customized as per department specific needs.

FP-295	Community Engagement - Field Project	[Credits-2]
Foundations of Field Work (1 credit)		
Topics Covered	Activities	
Field visits, Field work Reflection and Analysis	- Reflective journals on field experiences - Group presentations	
Community Impact Assessment	- Methods for assessing project impact - Group project: Conduct impact assessment in a chosen community	
Advanced Field Work (1 credit)		
Topics Covered	Activities	
Field Work, Project Presentation Review and Integration	- Review of key concepts from previous credits - Integration of community engagement and fieldwork principles - Analysis - Submission of CEP/FP project report	

Evaluation consist of two parts:

Evaluate each student for 50 marks per semester at department level –

- 20 marks for Continuous evaluation (CE)
 - Progress report on project implementation. (Field diary)
- 30 marks for End Semester Examination (ESE)
 - Project Report
 - Final presentation of field project findings assessing project outcomes and reflections.

UGC Recommended field-based activities:

1. Interaction with Self Help Groups (SHGs) women members, and study their functions and challenges; planning for their skill-building and livelihood activities;
2. Visit Mahatma Gandhi National. Rural Employment Guarantee Act 2005 (MGNREGS) project sites, interact with beneficiaries and interview functionaries at the work site;
3. Field visit to Swachh Bharat project sites, conduct analysis and initiate problem solving measures;
4. Conduct Mission Antyodaya surveys to support under Gram Panchayat Development Plan (GPDP);

5. Interactive community exercise with local leaders, panchayat functionaries, grass-root officials and local institutions regarding village development plan preparation and resource mobilization;
6. Visit Rural Schools/mid-day meal centres, study academic and infrastructural resources, digital divide and gaps;
7. Participate in Gram Sabha meetings, and study community participation;
8. Associate with Social audit exercises at the Gram Panchayat level, and interact with programme beneficiaries;
9. Visit to local Nagarpalika office and review schemes for urban informal workers and migrants;
10. Attend Parent Teacher Association meetings, and interview school drop outs;
11. Visit local Anganwadi Centre and observe the services being provided;
12. Visit local NGOs, civil society organisations and interact with their staff and beneficiaries;
13. Organize awareness programmes, health camps, Disability camps and cleanliness camps;
14. Conduct soil health test, drinking water analysis, energy use and fuel efficiency surveys and building solar powered village;
15. Raise understanding of people's impacts of climate change, building up community's disaster preparedness;
16. Organise orientation programmes for farmers regarding organic cultivation, rational use of irrigation and fertilizers, promotion of traditional species of crops and plants and awareness against stubble burning;
17. Formation of committees for common property resource management, village pond maintenance and fishing;
18. Identifying the small business ideas (handloom, handicraft, khadi, food products, etc.) for rural areas to make the people self reliant.
19. Any other Community engagement activity with approval of BOS and Academic Council. (Note that every department can also find CEP allied with their subject.)

Reference

1. **Guidelines on "Fostering Social Responsibility & Community Engagement in Higher Education Institutions in India 2.0** (<https://www.ugc.gov.in/publication/ebook>)