School of Architecture and planning

**University of Management and technology**

**Course Outline (on OBE)**

**Bachelor of Interior Architecture**

**UMT’s Vision**

**Our Vision is... Learning**

It defines our existence, inspires all stakeholders associated with us, creates a powerful momentum inside, and responds to the challenges outside. It continues to evolve as present captures new realities and foresight to unfold new possibilities. All in an incessant attempt to help individuals and organizations discover their God-given potentials to achieve Ultimate Success actualizing the highest standards of efficiency, effectiveness, excellence, equity, trusteeship and sustainable development of global human society.

**UMT Mission**

**Our Mission is.... Leading**

We aspire to become a learning institution and evolve as the LEADING COMMUNITY for the purpose of integrated development of the society by actualizing strategic partnership with stakeholders, harnessing leadership, generating useful knowledge, fostering enduring values, and projecting sustainable technologies and practices.

**Mission of the School**

The mission of the School is to provide the best leadership in the fields of the built environment; particularly in the development, management and innovation in the fields of architecture, urban planning and related specializations and sub-specializations

**Mission of the Department**

At the Department of Architecture our mission is to challenge the participants to develop their abilities in solving complex problems by thinking creatively & informed decision making as a core of their professional schooling. Offering them a diverse interdisciplinary and meticulous program of studies led by an adroit faculty in a comprehensive studios or class environment and preparing them for leadership roles in the field of Architecture, Construction, Landscape, Built Environment and community development.

**Course Code: Course Title: Eco-Integrated Interior Systems**

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| --- | --- |
| Program | Bachelor of Interior Architecture |
| Credit hours | 2+0 |
| Duration | 16 Weeks |
| Prerequisites | None |
| Resource Person |  |
| Counseling Timing | As per time table |
| Contact | https://mail.google.com/mail/u/0/images/cleardot.gif |

**Chairman/Director Program signature………………. Dean’s signature…………**

**Date………………………………….**

**Program Educational Objectives (PEOs):**

**PEO-1**: Able to interpret and elaborate on design knowledge effectively utilizing communication, graphical, and computer skills to convey design content comprehensively.

**PEO-2**: Possess strong analytical skills and ability to evaluate design challenges critically, proposing innovative solutions that address functional, aesthetic, and contextual considerations.

**PEO-3**: Able to apply principles of interior architecture in professional settings, showcasing creativity, technical proficiency, and adherence to ethical standards.

**Program Learning outcomes (PLOs)**

**PLO 1: Design Fundamentals:** Develop the ability to conceive and execute innovative and aesthetically pleasing interior spaces that meet both functional requirements and artistic standards.

**PLO 2: Design Development and Analysis:** Integrate knowledge from various disciplines to analyze complex design problems and demonstrate proficiency in conceptualizing and developing design solutions through various stages.

**PLO 3: Technical and Technological Competence:** Acquire a comprehensive understanding of construction methods, materials, and building systems coupled with expertise in utilizing industry-standard software and tools for design, drafting, modeling, and rendering, to produce precise and detailed technical drawings and specifications.

**PLO 4: Effective Communication and Visual Representation:** Enhance ability in expressing design concepts and solutions through verbal and written communication, while adeptly employing visual representation tools like sketches, renderings, and digital models.

**PLO 5: Sustainability and Environmental Responsibility:** Demonstrate a commitment to sustainable design practices by understanding and applying principles of environmental stewardship, energy efficiency, and resource conservation in interior architecture projects.

**PLO 6: Professional Readiness:** Prepare for professional practice in interior architecture by imparting knowledge of ethical, legal, and business aspects, while fostering skills in project management, client communication, collaboration with other design professionals, and adherence to industry standards.

**Course Overview:**

This course explores the integration of ecological principles within interior architecture. It aims to equip students with the knowledge and skills necessary to design interior environments that are both aesthetically pleasing and environmentally responsible. The course covers sustainable materials, energy-efficient systems, indoor air quality, and the impact of design on occupant well-being. Students will engage in theoretical studies, practical applications, and design projects to create eco-friendly interior spaces.

**Course Learning outcomes (CLO’s)**

1. Understand Ecological Principles: Demonstrate a comprehensive understanding of ecological principles and how they apply to interior architecture.
2. Sustainable Material Selection: Identify and evaluate sustainable materials and products for use in interior design projects.
3. Energy Efficiency and Indoor Air Quality: Develop strategies for incorporating energy-efficient systems and improving indoor air quality in interior spaces.
4. Design Integration: Create interior design projects that integrate ecological principles, demonstrating an ability to balance aesthetics, functionality, and sustainability.

**Mapping of CLOs to Program’s Learning outcomes (PLO’S)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Semester** | **Course Code** | **Title** | **Course Learning outcomes** | **PLO-1 Design Fundamentals** | **PLO-2 Design Development and Analysis** | **PLO-3 Technical and Technological Competence** | **PLO-4 Effective Communication and Visual Representation** | **PLO 5: Sustainability and Environmental Responsibility** | **PLO6: Professional Readiness** |
| **SEMESTER** |  | **Eco-Integrated Interior SystemsTechniquesMETHODOLOGY** | Understand Ecological Principles: Demonstrate a comprehensive understanding of ecological principles and how they apply to interior architecture. | √ |  |  |  |  |  |
| Sustainable Material Selection: Identify and evaluate sustainable materials and products for use in interior design projects. |  |  |  |  | √ |  |
| Energy Efficiency and Indoor Air Quality: Develop strategies for incorporating energy-efficient systems and improving indoor air quality in interior spaces. |  | √ |  |  |  |  |
| Design Integration: Create interior design projects that integrate ecological principles, demonstrating an ability to balance aesthetics, functionality, and sustainability. |  |  | √ |  |  |  |

**Grade Evaluation Criteria**

Following are the criteria for the distribution of marks to evaluate final grade in a semester.

**Marks Evaluation Marks in percentage**

Assignments 10%

Quiz 15%

Mid Term 25%

Final exam 50%

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Total 100%

**Learning Methodology:**

* Lectures: Theoretical concepts and principles of eco-integrated interior design.
* Case Studies: Analysis of existing eco-friendly interior projects.
* Workshops: Hands-on sessions to explore sustainable materials and technologies.
* Design Projects: Practical projects to apply learning outcomes in real-world scenarios.
* Guest Lectures: Sessions with industry professionals and sustainability experts.
* Field Trips: Visits to eco-friendly buildings and interior spaces to observe and analyze practical applications.

**Recommended Books:**

* "Sustainable Design: A Critical Guide" by David Bergman
* "Eco-Interiors: A Sourcebook for Green Design" by Andrea Rowe
* "Designing Interior Architecture: Concept, Typology, Material, Construction" by Sylvia Leydecker

**Reference Books:**

* "Cradle to Cradle: Remaking the Way We Make Things" by William McDonough and Michael Braungart
* "The Philosophy of Sustainable Design" by Jason F. McLennan
* "Interior Design and Architecture: Critical and Primary Sources" edited by Mark Taylor

**Calendar of Course contents to be covered during semester**

**Course code Course title: Illustration: Eco-Integrated Interior Systems**

|  |  |  |  |
| --- | --- | --- | --- |
| **Week** |  **Course Contents**  | **CLO** | **Reference Chapter(s)** |
| 1 | Introduction to Eco-Integrated Interior SystemsCourse overview and expectationsIntroduction to ecological principles in interior design |  |  |
| 2 | Sustainable Design ConceptsUnderstanding sustainability in interior architectureKey principles and frameworks |  |  |
| 3 | Sustainable MaterialsExploration of eco-friendly materialsMaterial selection criteria and life cycle assessment |  |  |
| 4 | Energy-Efficient SystemsPrinciples of energy efficiencyIntegration of renewable energy systems in interior design |  |  |
| 5 | Indoor Air QualityFactors affecting indoor air qualityStrategies to improve air quality in interior spaces |  |  |
| 6 | Water Conservation in InteriorsWater-saving fixtures and technologiesDesigning for water efficiency |  |  |
| 7 | Daylighting and Lighting DesignNatural lighting strategiesEnergy-efficient artificial lighting solutions |  |  |
| 8 | Acoustic Design in Sustainable InteriorsImportance of acoustics in interior spacesSustainable acoustic materials and design strategies |  |  |
| 9 | **Mid Term Exam** |  |  |
| 10 | Case Studies of Eco-Friendly InteriorsAnalysis of successful eco-integrated interior projectsLessons learned and best practices |  |  |
| 11 | Sustainable Furniture and FurnishingsSelection of sustainable furniture and furnishingsImpact of furnishings on indoor environmental quality |  |  |
| 12 | Health and Well-being in Interior DesignDesigning for occupant health and well-beingBiophilic design principles |  |  |
| 13 | Waste Management in Interior ProjectsStrategies for reducing waste in interior designRecycling and upcycling practices |  |  |
| 14 | Integrative Design ProcessCollaborative approaches to eco-integrated designInterdisciplinary teamwork and communication |  |  |
| 15 | Final Design Project PresentationsPresentation of student design projectsPeer and instructor feedback |  |  |
| 16 | Course Review and Future TrendsReview of key concepts and learning outcomesDiscussion on future trends in eco-integrated interior designFinal Examination and Project SubmissionFinal assessment and submission of design projects |  |  |