



योजना तथा वास्तुकला विद्यालय, विजयवाड़ा

School of Planning and Architecture, Vijayawada

An Institute of National Importance, Ministry of Education, Govt. of India

Department of Architecture

Course:	(Elective) MACO2112 - Heritage Impact Assessment
Class:	M.Arch - II Year III Semester 2026-27
Instructor:	Ar. Narasimman R
Contact Periods/Week:	03 periods (55 minutes each)
Time Table:	Thursday (03 periods) 9:00-11:45am
Internal Assessment:	50 marks
External Theory Exam:	50 marks
Total Marks:	100
Credits:	3

Course Objectives:

To enable students' exposure to Heritage Impact Assessment (HIA) as a comprehensive protection tool and methodology for conservation and sustainable development of cultural heritage. This course emphasizes a sustainable planning approach that critically evaluates the adverse effects of development activities on heritage values. It further encompasses contemporary concerns including climate resilience, digital preservation, community participation, and equitable heritage management.

Course Outcomes:

Upon completion of this course, students will be able to:

- Understand the theoretical foundations and international frameworks of Heritage Impact Assessment
- Apply HIA methodologies to real-world heritage conservation scenarios
- Identify, evaluate, and mitigate impacts on cultural heritage sites
- Engage with communities and stakeholders in heritage management processes
- Integrate climate resilience and digital heritage considerations into HIA

Lecture Schedule

Week	Date	Lecture Plan & Topics	Remarks/Assessment
1	23.07.2026	Introduction to course, syllabus overview, and evolution of heritage conservation	Lecture
2	30.07.2026	Impact Assessments: Terminology, Types (SEA, EIA, HIA), and Integrated Approaches	Lecture + Discussion
3	06.08.2026	Heritage Impact Assessment: Definitions, Aims, Need, and Applicability	Lecture + Discussion
4	13.08.2026	HIA Relevance to UN SDGs, International Conventions, and Global Heritage Frameworks	Lecture + Discussion
5	20.08.2026	HIA as a Sustainable Planning Approach: Balancing Development and Heritage Conservation	Lecture + Discussion
6	27.08.2026	International & National Agencies: UNESCO, ICOMOS, ICCROM, NMA, IAIA, World Heritage Committee	Lecture + Discussion Assignment 1
7	03.09.2026	International and National HIA Guidelines, Standards, and Best Practices	Lecture + Discussion
8	10.09.2026	HIA Procedures, Formats, Documentation, and Report Structure	Lecture + Discussion
9	17.09.2026	Climate Change and Heritage Resilience: Incorporating Climate Risk Assessment in HIA	Lecture + Discussion
10	24.09.2026	Digital Heritage and 3D Documentation: Recording, Modeling, and Virtual Heritage in HIA	Lecture + Discussion
11	01.10.2026	Community Engagement and Stakeholder Participation in Heritage Management	Lecture + Discussion Mid-Semester Exam
12	08.10.2026	Step-wise HIA Process: Screening, Scoping, Baseline Study, Threat and Impact Evaluation	Lecture + Discussion

13	15.10.2026	Mitigation Strategies, Change Determination, Monitoring and Compliance Frameworks	Lecture + Discussion
14	22.10.2026	International Case Studies: HIA in World Heritage Sites (Part 1)	Lecture + Discussion
15	29.10.2026	Indian Heritage Sites: HIA Applications in Indian Context (Part 2)	Lecture + Discussion Assignment 2
16	05.11.2026	Individual Project Work: Case Site Analysis and Impact Identification	Discussion/Guidance
17	05.11.2026	Project Presentations and Final HIA Report Submission	Assessment 3

Evaluation Criteria:

S. No.	Evaluation Stage	Weightage
1	Assignment 1	10 marks
2	Mid-Semester Examination	20 marks
3	Assignment 2	20 marks
4	Internal Assessment	Total: 50 marks

New Areas for 2026-27:

Climate Resilience in Heritage Conservation:

Integration of climate change risk assessment into HIA procedures. Understanding vulnerabilities of heritage sites to climate hazards (flooding, erosion, temperature extremes). Adaptation strategies and resilience planning for long-term heritage preservation.

Digital Heritage and 3D Documentation:

Application of 3D scanning, photogrammetry, and Building Information Modeling (BIM) for heritage documentation. Virtual heritage and digital twins in impact assessment. Archiving and long-term preservation of digital records.

Community-Centered Heritage Management:

Participatory approaches in HIA and heritage planning. Rights-based frameworks for indigenous and local communities. Equitable benefit-sharing and inclusive decision-making processes.

Emerging Threats and Vulnerabilities:

Assessment of impacts from tourism, urbanization, climate change, and geopolitical conflicts. Digital threats (cybersecurity for heritage data) and looting/trafficking issues. Adaptive management frameworks.

Key References:

- Jo, E., Mackay, R., Murai, M., & Therivel, R. (2023). Guidance and Toolkit for Impact Assessments in a World Heritage Context. UNESCO.
- ICOMOS (2011). Guidance on Heritage Impact Assessments for Cultural World Heritage Properties.
- UNESCO (2012). World Heritage Committee Guidelines and Recommendations.
- Cepaitiene, R., Bers, V.M., Szmelter, I., Navickiene, V. (2015). How to Assess Built Heritage Assumptions, Methodologies, Examples. UNESCO.
- National Monument Authority (NMA), India. Heritage Impact Assessment Guidelines and Procedures.
- IPCC (2021). Climate Change and Heritage: A Practical Guide to Assessment and Adaptation.
- Letellier, R., Schmid, W., & LeBlanc, F. (2007). Recording, Documentation, and Information Management for the Conservation of Heritage Places. Getty Conservation Institute.
- Ridge, M.M. (Ed.). (2014). Crowdsourcing our Cultural Heritage. Ashgate Publishing.