



SOPHIA COLLEGE FOR WOMEN (EMPOWERED AUTONOMOUS)

Affiliated to the University of Mumbai

Programme: Humanities

Education

T.Y.B.A. EDUCATION (Minor)

**Syllabus for the Academic Year 2025-2026 based on
the National Education Policy 2020**



SOPHIA COLLEGE FOR WOMEN (EMPOWERED AUTONOMOUS)

DEPARTMENT OF EDUCATION

COURSE DETAILS FOR MINOR:

	SEMESTER 5		SEMESTER 6
TITLE	AI in Education I		AI in Education II
TYPE OF COURSE - DSC	Minor		Minor
CREDITS	2		2



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Preamble:

Our commitment is to foster a holistic approach to education, one that recognizes the interconnectedness of cultural, social, psychological, and historical factors that shape learning and development. As such, students will explore a range of interdisciplinary perspectives, drawing from fields such as psychology, sociology, philosophy, languages, and history, to enrich their understanding of education and its impact on individuals, communities, and societies.

We, at Department of Education, provide students with a comprehensive understanding of the principles, theories, and practices that underpin the field of education. Through a combination of rigorous coursework, and critical reflection, students will engage deeply with the multifaceted dimensions of education, preparing them to become informed and effective educators, advocates, and leaders in diverse educational settings.

Throughout their studies, students will have the opportunity to critically examine educational policies, practices, and systems, considering issues of equity, diversity, inclusion, and social justice. By engaging with real-world challenges, presentations and group discussions and orientation events, students will develop the analytical skills, ethical awareness, and cultural competence needed to navigate complex educational landscapes and effect positive change.



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PROGRAMME OBJECTIVES

PO 1	Disciplinary Knowledge Students will acquire foundational knowledge of Artificial Intelligence and its transformative role in education.
PO 2	Communication and Digital Literacy Students will demonstrate the ability to use AI-powered tools and digital platforms for teaching, learning, assessment, and content creation.
PO 3	Critical Thinking and Ethical Reasoning Students will critically analyse the benefits, challenges, and ethical implications of Artificial Intelligence in the Indian educational context.
PO 4	Problem Solving and Application of Knowledge Students will apply Artificial Intelligence in lesson planning and instructional design to support personalized and inclusive learning.
PO 5	Social Responsibility and Policy Awareness Students will evaluate the social, cultural, and policy dimensions of Artificial Intelligence in education with sensitivity to national priorities.



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PROGRAMME SPECIFIC OUTCOMES

PSO 1	Explain the foundational concepts of Artificial Intelligence and describe its practical, ethical and inclusive applications in education.
PSO 2	Identify and evaluate AI-driven tools used in teaching, learning, content development, and assessment.
PSO 3	Analyse the practical implications of integrating AI in Indian educational settings, including opportunities and barriers.
PSO 4	Design simple, AI-enhanced educational activities or lesson plans tailored to diverse learner needs.
PSO 5	Apply critical thinking to assess the ethical, social, and policy dimensions of AI in education, including issues of data privacy and bias.



SOPHIA COLLEGE FOR WOMEN (EMPOWERED AUTONOMOUS)

Programme: Humanities Education Minor	Semester – 5
Course Title: AI in Education I	Course Code: AEDU355MN
<u>COURSE OBJECTIVES:</u> At the end of this course, the student will be able to <ol style="list-style-type: none">1. Understand the fundamentals of Artificial Intelligence (AI) and its relevance in education.2. Explore AI-powered tools used in teaching, learning, and assessment.3. Analyse the benefits and challenges of integrating AI in Indian classrooms.4. Apply AI tools for personalized learning, content creation, and student support.5. Reflect on ethical, social, and policy issues related to AI in education.	
<u>COURSE OUTCOMES:</u> At the end of this course, the student will be able to: <ol style="list-style-type: none">1. Explain the core concepts, history, and evolution of AI and its applications in education.2. Identify and evaluate AI-based tools like chatbots, LMS, quiz generators, and personalized feedback systems.3. Analyse opportunities, challenges, and teacher roles in AI-enabled Indian classrooms.4. Design AI-enhanced educational activities or lesson plans addressing diverse learners' needs.5. Demonstrate the use of AI for content creation and student support.6. Reflect critically on ethical issues, including privacy, bias, and data protection in AI-enabled education.7. Predict and interpret future trends and human-AI collaborations in teaching and learning.	



SOPHIA COLLEGE FOR WOMEN (EMPOWERED AUTONOMOUS)

Theory Lectures per week (1 Lecture is 60 minutes)		2	
Total number of Hours in a Semester		30	
Credits		2	
Evaluation System	Semester End Examination	1 Hour	30 marks
	Internal Assessment	--	20 marks

UNIT 1 Introduction to AI and its Role in Education	1.1	Concept and Definition of Artificial Intelligence	15 hours
	1.2	History and Evolution of AI	
	1.3	Applications of AI across Various Sectors, with Emphasis on Education	
	1.4	AI-based Learning Platforms and Learning Management Systems (LMS)	
	1.5	AI for Content Creation: Chatbots, Quiz Generators, and Educational Videos	
	1.6	AI in Assessment and Personalized Feedback	
UNIT 2 AI Implementation	2.1	Opportunities and Challenges of AI in Indian Classrooms	15 hours
	2.2	The Changing Role of Teachers in AI-Enabled Learning Environments	
	2.3	Using AI to Support Inclusive Education and Differently Abled Learners	
	2.4	Ethical Issues: Bias, Privacy, Surveillance, and Data Protection	
	2.5	Human-AI Collaboration in Teaching and Learning	
	2.6	Future trends in AI and education	



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ASSESSMENT DETAILS:

I. Continuous Assessment (CA): 20 marks

1. A minimum of two activities will be given in each semester.
2. Each will be for 10 marks.
3. The nature of the activities will be decided by the Examiner and may include Assignment/ MCQs/ Short notes and/or any other type of /combination of objective or descriptive type activity.

II. Semester End Examination (SEE): 30 marks

1. All units of the syllabus will be covered in SEE and will be given equal weightage.
2. There will be three mandatory questions: All Questions will carry equal weightage of 10 marks.

REFERENCES:

AEDU355MN AI in Education I

1. UNESCO Report: AI and Education – Guidance for Policymakers
[\[https://unesdoc.unesco.org/\]](https://unesdoc.unesco.org/)
A global perspective with sections relevant for Indian context.
2. NEP 2020 (National Education Policy) – Sections on Technology and Digital Integration
[\[https://www.education.gov.in/\]](https://www.education.gov.in/)
Essential for understanding the policy framework for AI in Indian education.
3. Coursera / EdX / Swayam – Free MOOCs
Courses to Explore:
 - “AI For Everyone” by Andrew Ng (Coursera)
 - “AI in Education” (Swayam/NPTEL)
4. OECD Report: "AI and the Future of Skills"
[\[https://www.oecd.org/\]](https://www.oecd.org/)

Offers futuristic insights on AI and education systems worldwide.



SOPHIA COLLEGE FOR WOMEN (EMPOWERED AUTONOMOUS)

Programme: Humanities Education Major	Semester – 6
Course Title: AI in Education II	Course Code: AEDU366MN
<u>COURSE OBJECTIVES:</u> At the end of this course, the student will be able to: <ol style="list-style-type: none">1. Understand the principles of AI integration in curriculum design and pedagogy.2. Analyze and apply AI-supported pedagogical models to enhance teaching and learning.3. Interpret educational data using AI analytics and predictive models to inform decision-making.4. Utilize AI tools for research, knowledge discovery, and academic innovation5. Explore edupreneurship opportunities in AI-based education and understand sustainable business models.6. Examine the role of AI in achieving Sustainable Development Goals (SDGs) and promoting equity in education	
<u>COURSE OUTCOMES:</u> At the end of this course, the student will be able to: <ol style="list-style-type: none">1. Explain the importance of integrating AI into curriculum design and teaching.2. Design AI-enhanced lesson plans using intelligent tools and assessment feedback.3. Interpret educational data using AI analytics and predictive models to support decision-making.4. Use AI tools ethically for research, knowledge discovery, and academic projects.5. Explore edupreneurship opportunities and propose AI-based educational initiatives6. Evaluate AI's role in achieving Sustainable Development Goals (SDGs) and promoting equity in education.7. Reflect on ethical considerations, bias, and responsible use of AI in teaching and learning.	



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Theory Lectures per week (1 Lecture is 60 minutes)		2	
Total number of Hours in a Semester		30	
Credits		2	
Evaluation System	Semester End Examination	1 Hour	30 marks
	Internal Assessment	--	20 marks

UNIT 1 AI in Curriculum Design and Pedagogy	1.1	AI-Integrated Curriculum Design	15 hours
	1.2	Pedagogical Models Supported by AI	
	1.3	Designing AI-Enhanced Lesson Plans	
	1.4	Design Thinking and Innovation in AI-Based Education	
UNIT 2 Research, Policy, and Future Directions in AI and Education	2.1	Educational Data Analytics and AI Insights	15 hours
	2.2	AI in Research and Knowledge Discovery	
	2.3	Edupreneurship	
	2.4	AI for Sustainable Development Goals (SDGs)	



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3. The nature of the activities will be decided by the Examiner and may include Assignment/ MCQs/ Short notes and/or any other type of /combination of objective or descriptive type activity.

II. Semester End Examination (SEE): 30 marks

1. All units of the syllabus will be covered in SEE and will be given equal weightage.
2. There will be three mandatory questions: All Questions will carry equal weightage of 10 marks.

REFERENCES:

AEDU366MN AI in Education II

1. UNESCO. (2023). *Guidance on generative AI in education and research*.
2. UNESCO. (2021). *AI and education: Guidance for policy-makers*.
3. Organisation for Economic Co-operation and Development. (2021). *AI in education: Implementing responsible and inclusive AI*.
4. Organisation for Economic Co-operation and Development. (2020). *Ethics of AI in education*.
5. Luckin, R. (2018). *Machine learning and human intelligence: The future of education for the 21st century*. UCL Institute of Education Press.
6. Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial intelligence in education: Promises and implications for teaching and learning*. Center for Curriculum Redesign.
7. Holmes, W., & Tuomi, I. (2022). *State of the art: AI in education research*. European Commission.
8. World Bank. (2022). *The future of education: Using AI for inclusion*.
9. Ministry of Education, Government of India. (2023). *AI for All programme (CBSE & Intel)*.
10. NITI Aayog. (2021). *Responsible AI for all: National strategy for AI*.
11. NITI Aayog. (2023). *AI in schools: Pilot projects and findings*.
12. Central Board of Secondary Education. (2024). *Curriculum framework for artificial intelligence*.
13. National Council of Educational Research and Training. (2023). *Handbook on AI curriculum for schools*.
14. Central Board of Secondary Education & National Council of Educational Research and Training. (2023). *Modules on AI-based school analytics*.
15. Ministry of Electronics & Information Technology. (2023). *IndiaAI portal: Policy papers and insights*.
16. Indira Gandhi National Open University. (2022). *AI tools in educational research*.