

**MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB**  
**Syllabus of B. Sc. In Multimedia Animation & Graphics**  
**(Effective for 2020-2021 Admission Session)**  
**Choice Based Credit System**  
**140 Credit (3-Year UG) MAKAUT Framework**  
**w.e.f 2020-21**

**2<sup>nd</sup> Semester**

Subject Type	Course Name	Course Code	Credit Distribution			Credit Points	Mode of Delivery			Proposed Moocs
			Theory	Practical	Tutorial		Offline	Online	Blended	
CC 3	Graphic Design	BMAGD (T) 201	4	0	0	6	✓			As per MAKAUT Notification
		BMAGD 291	0	2	0					
CC 4	Web Design	BMAGD (T) 202	4	0	0	6	✓			
		BMAGD 292	0	2	0					
GE 2	Students have to select from the GE Basket					6			✓	
AECC 2	Environmental Science	BMAGD 265	2	0	0	2	✓			
<b>Semester Credits</b>						<b>20</b>				

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Code: BMAGD 201

Course: **Graphic Design**

**Course Objective:** The course is designed to provide an introduction to the fundamental aspects of graphic design using design methodologies to solve user-centric problems. Students will be able to develop an in-depth understanding of processes to help create better design workflows using graphical representations.

Sl	Course Outcome (CO)
1	To understand the Fundamentals, element and process of Graphic design.
2	Identifying the problems, develop an in-depth understanding of processes to help create better design.
3	Application of tools and techniques to create design projects.
4	Apply ethical principles and commit to professional ethics and responsibilities of design practice as an individual, and as a member or leader in diverse teams and in multidisciplinary settings.
5	Communicate effectively through design documentation, make effective presentations, and give and receive clear instructions.
6	Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the design process and social delivery.

**Theory- BMAGD(T) 201**

CO	Blooms Level (if applicable)	Modules	%age of questions
CO1	1,2	M1,M2	30
CO2	1,2,3	M2	20
CO3	2,3,4	M2	15
CO4	1,3,5,6	M4	20
CO5	1,3,5,6	M4,M5	15
CO6	1,2,3	M2	10
			<b>100</b>

**Practical- BMAGD 291**

CO	Blooms Level (if applicable)	Modules	%age of questions
CO1			
CO2			
CO3		M3	15
CO4		M4	15
CO5	2,3,4,5	M5	20
CO6	3,4,5,6	M6	50
			<b>100</b>

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Paper- Graphic Design

Credits- 4T + 2P

**Module 1-** History and evolution of Graphic Design.

The student shall be introduced to the cumulative effects of historical developments of art and political movements along with the changes in socio-cultural outlook of the world that has led to the current understanding of graphic design.

**Module 2-** Design Basics- Elements and principles of Design.

An introduction to the elements and the basic principles which help in the creation of any artistic expression with the help of case studies and historical examples of the same.

**Module 3-** Relational interaction of elements and principles in design implementation.

The students shall have a hands-down experience of using and playing with the various interactional outcomes that arise out of experiments with the various formal elements of design.

**Module 4- composition** and Gestalt laws of organisation

An in-depth introduction to composition in design and all the elements that make up a successful and meaningful composition.

**Module 5-** typography and graphic design

Introduction to typography as one of the most important pillar of modern graphic design, playing with typographic compositions, understanding the anatomy and formal aspects of type to be used in graphic design

**Module 6 – Design Studio:**

Execution and culmination of the knowledge gathered from all the other modules of the semester into a design project.

**Reference Books:**

1. Elements of Design, by Gail Greet Hannah, Princeton Architectural Press
  2. Graphic design manual, Principles and Practice. Armin Hoffman; Arthur Niggli Publisher, Multilingual edition.
  3. Graphic design history by Steven Heller & Georgetta Balance
  4. Design Dictionary-Perspectives on Design Terminology by Michael Erlhoff and Tim Marshall
  5. A History of Graphic Design, Meggs, Philip; John Wiley & Sons
  6. The Visual Dictionary of Photography by David Präkel
  7. Graphic design manual, Principles and Practice. Armin Hoffman; Arthur Niggli Publisher, Multilingual edition.
  8. The Design Process by Karl Aspelund
  9. The Design Method by David Airey
  10. 100 Design methods by Vijay Kumar
  11. Lateral thinking by Edward DeBono
  12. Mind mapping- Tony Buzun
- How to think Like a Great Graphic Designer by Debbie Millman with a foreword by Steven Heller

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Course: Web Design

**Course Objective:**

The course is designed to provide an introduction to the fundamental aspects of Web design using different methodologies to solve user-centric problems. Students will be able to develop an in-depth understanding of processes to help create better design workflows using web Design & technology and methods.

Sl	Course Outcome (CO)
1	To understand the web Design & technology and methods .
2	To understand network, different ways of sending data across the network
3	Application of tools and techniques in Network Security, cyber law & cyber security.
4	Application of tool & techniques, site management, writing Html with CSS.
5	Understand Different types of Web Sites, B a s i c web design principles. Concept of interface and interaction design.
6	Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the WEB design process and social delivery.

**Theory- BMAGD(T) 202**

CO	Blooms Level (if applicable)	Modules	%age of questions
CO1	1,2	M1.M2	20
CO2	2,3,4,5	M2	15
CO3	1,2,3	M2,M3	15
CO4	1,2,3	M3,M4	15
CO5	1,2,3	M3,M4	15
CO6	1,2,3	M2,M3	20
			<b>100</b>

**Practical- BMAGD 292**

CO	Blooms Level (if applicable)	Modules	%age of questions
CO1		M1	10
CO2		M2	15
CO3		M3	10
CO4		M4	10
CO5	1,3,5,6	M5	15
CO6	3,4,5,6	M6	40
			<b>100</b>

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**Paper: Web Design**

Credits- 4T + 2P

**Module 1- Introduction to web Design & technology and Methods**

Introduction to web Design & technology and methods, web standards, Concept of WWW, domain names, URL web hosting ,Browser-function and features,

**Module 2- Introduction to Networks and Sever Technology**

Introduction to Networks and Sever Technology. Evolution of network, different ways of sending data across the network, data communication terminology: concept of channel, baud, bandwidth(Hz, KHz, MHz; data transfer rate(bps, Kbps, Mbps, Gbps, Tbps), transmission media, network devices : Modem, Ethernet card, Hub, Switch, Gateway; Different Topologies: Bus, star, concepts of LAN, WAN, MAN;  
Protocol: TCP/IP,FTP, PPP, Telnet, internet, Wireless/mobile communication, GSM, CDMA, Voice mail ;

**Module 3- Web Server**

Types of sever & function with examples, Network Security concept

**Module 4- Digital Design**

Web page layout with Dream weaver: introduction & interface of Dreamweaver, tool &techniques, site management, writing Html with CSS, create layout of website

Introduction to HTML: html structure, development process, html tags to create a web page &

attributes

Style Sheets: introduction-need for css, basic syntax and structure: background, colour and properties, manipulating text, images, boxes, margin, padding, positioning, linking with html page

JavaScript: variables, functions, conditions, loops, repetition, form validation, events and buttons; combine html, css, JavaScript

**Module 5- Design Project**

Introduction to Web Design. Different types of Web Sites, B a s i c web design principles. Concept of interface and interaction design. Planning of a design, sitemap visualize navigation design.

Developing a Web Site layout

Typography and Images for Web. Multimedia and Interactivity Elements responsive layout basics, designing for various Browsers, grid structure, Understanding Blogs, Understanding Social Networks,

Web Publishing Fundamentals. Promoting and Maintaining Web Site

**Module 6 – Design Studio:**

Execution and culmination of the knowledge gathered from all the other modules of the semester into a design project.

**Reference Books:**

- Web Technologies by Uttam Kumar Roy
- Learning Web Design by Jennifer Niederst Robbins

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- Web application: Concept & Real world Design - Craif Knuckles & David Yuen
- HTML & CSS Design and Build Website by Jon Duckett
  
- HTML and CSS: Design and Build Websites by Jon Duckett
- Learning Web Design: A Beginner's Guide to (X)HTML, StyleSheets, and Web Graphics by Jennifer Niederst Robbins and Aaron Gustafson
- HTML black book: Steven Holzner

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**AECC 2- Environmental Science**

**Semester Credits- 2T**

**Course Objective:** The course is designed to provide a working knowledge of environment, ecology and physical sciences for problem solving. The learner will be able to remember, understand and apply the taught concepts and methods involving social and environmental processes for betterment of environmental health and safety.

**COURSE OUTCOMES (CO):**

Sl	Course Outcome	Mapped modules
1	Be able to remember the basic concepts related to environment & ecology	M1,M2
2	Be able to remember & understand the scientific problem related to air, water, noise & land pollution	M1, M2
3	Be able to understand environmental laws , regulations , guidelines and n applying those for maintaining quality of environmental health and safety .	M1, M2,M3

Module Number	Content	Total Hours	%age of questions	Covered CO	Blooms Level
Module 1	Environmental Concepts	7	30%	1,2	L1
Module 2	Resources & Pollution	6	30%	2,3	L1, L2
Module 3	Environment Management	7	40%	1,2,3	L2,L3

**SYLLABUS**

**Module 1: Environmental Concepts** – Definition & basic concept of Environment & Ecology, man, society & environment, their interrelationship, Elements of ecology elements of ecology - species, population, community, definition of ecosystem- Structure & function of ecosystem (Bio geo chemical cycles, food chain, energy flow, ecological pyramid), Biodiversity & its threats and remedies. [7]

**Module 2: Resources & Pollution** – Renewable & non-renewable resources, Bio-degradable and non-biodegradable pollutants, Sources & Effects of Pollution, Methods of Control (Air, Water. Land, & Noise)

**Module 3: Environment Management** - Concept & scope of environment Management, National environmental policy & Environmental Legislations in India, Environment Management System – ISO 14000, Environmental Audit, Eco mark, green Industry, Cases on Environment Impact Assessment.

**REFERENCES**

Suggested Readings

1. N.K. Oberoi: Environmental Management, Excel Books
2. G.N. Pandey: Environmental Management, Vikas
3. K.M. Agrawal & P.K. Sikdar: Text Book of Environment, MacMillan
4. L.W. Canter: Environmental Impact Assessment, McGraw Hill

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5. M.P. Poonia & S.C. Sharma, Environmental Studies, Khanna Publishing House (AICTE Recommended Textbook – 2018)
6. Masters, G. M., “Introduction to Environmental Engineering and Science”, Prentice-Hall of India Pvt. Ltd.,1991.
7. De, A. K., “Environmental Chemistry”, New Age International
8. Fundamentals of Ecology -Odum, E.P.
9. Instant notes on Ecology -Mackenzie, A., Ball, A.S. and Virdee, S.R. (1999) Viva Books
10. G. Dasmahapatra – Basic Environmental Engineering & Elementary Biology, Vikas Publication
11. Environmental Science, Cunningham, TMH
12. Environmental Pollution Control Engineering, C.S.Rao, New Age International
13. Environmental Science, Wright & Nebel, PHI
14. Environmental Pollution Analysis, S.M.Khopkar, New Age International