

**Scheme & Syllabus of  
UNDERGRADUATE DEGREE COURSE**

**IV Semester  
(Visual Effects)**



**Rajasthan Technical University, Kota**

**Effective from session: 2024-25**



# RAJASTHAN TECHNICAL UNIVERSITY, KOTA

## Scheme & Syllabus

### II Year-IV Semester: Visual Effects

#### Teaching and Examination Scheme: BVE

#### II Year - IV Semester

THEORY											
Sr. No.	Category	Course		Contact hrs./week				Marks			Credits
		Code	Title	L	T	P	Total Hrs.	IA	ETE	Total	
1	Applied Art & Craft	4BVE-01	History of Western art-II	2	-	-	2	30	70	100	2.0
2	Applied Art & Craft	4BVE-02	Basics of Video Production-I	3	1	-	4	30	70	100	4.0
3	Applied Art & Craft	4BVE-03	Fundamentals of Animation & Visual effects (VFX)-II	3	-	-	3	30	70	100	3.0
4	Applied Art & Craft	4BVE-04	Theory of Graphic Design-II	3	-	-	3	30	70	100	3.0
5	Applied Art & Craft	4BVE-05	Theory of Advertising- II	3	-	-	3	30	70	100	3.0
<b>Sub Total</b>				<b>14</b>	<b>1</b>	<b>-</b>	<b>15</b>	<b>150</b>	<b>350</b>	<b>500</b>	<b>15.0</b>
PRACTICAL & SESSIONAL											
6	Applied Art & Craft	4BVE-06	Drawing & Illustration –II	-	-	4	4	60	40	100	2.0
7	Applied Art & Craft	4BVE-07	Video Production Lab-I	-	-	3	3	60	40	100	1.5
8	Applied Art & Craft	4BVE-08	Graphic design Lab-II	-	-	3	3	60	40	100	1.5
9	Applied Art & Craft	4BVE-09	Digital Art Lab – III	-	-	4	4	60	40	100	2.0
10	Applied Art & Craft	4BVE-10	Animation Lab-II	-	-	4	4	60	40	100	2.0
11	Applied Art & Craft	FECxx	Foundation Course	-	-	-	-	-	-	100	0.5
<b>Sub Total</b>				<b>-</b>	<b>-</b>	<b>18</b>	<b>18</b>	<b>300</b>	<b>200</b>	<b>600</b>	<b>9.5</b>
<b>TOTAL OF IV SEMESTER</b>				<b>14</b>	<b>1</b>	<b>18</b>	<b>33</b>	<b>450</b>	<b>550</b>	<b>1100</b>	<b>24.5</b>

**L:** Lecture, **T:** Tutorial, **P:** Practical.

**ETE:** End Term Exam, **IA:** Internal Assessment.



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### II Year-IV Semester: Visual Effects

#### 4BVE-01: History of Western art-II

**Credit: 2**  
**2L+0T+0P**

**Maximum Marks: 100 (IA: 30, ETE: 70)**  
**End Term Exam: 3 Hours**

Sr. no.	Topic	No. of Hours
1.	Medieval Art:- i.) Early Christian Art. ii.) Understand Early Christian Art & Architecture.	6
2.	Byzantine Art:- i.) Byzantine Art. ii.) Short history of Byzantine Empire. iii.) Byzantine Architecture. iv.) Byzantine Iconoclasm. v.) Macedonian Art (Byzantine). vi.) Byzantine Mosaics.	6
3.	Romanesque Art:- i.) Introduction of Romanesque Art Architecture. ii.) Romanesque Art characteristics. iii.) Sculpture and Paintings of Romanesque Art.	8
4.	Gothic Art:- i.) Introduction to Gothic Art. ii.) Gothic Architecture. iii.) Sculpture and Paintings of Gothic Art.	6

#### Reference Books:

1. Concise History of Art (vol. I & II)-Germain Bazin.
2. Europe Ki Chitrakala by G.K. Agrawal, Ashok Prakashan Mandir, Aligarh.
3. Art Now-Herbert Read.
4. Grass root of Art-Herbert Read.
5. Key Monuments of the History of Art-H.W. Janson.
6. European Painting and sculpture-Eric Newton.



# RAJASTHAN TECHNICAL UNIVERSITY, KOTA

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### II Year-IV Semester: Visual Effects

#### 4BVE-02: Basics of Video Production-I

**Credit: 4**  
**3L+1T+0P**

**Maximum Marks: 100 (IA: 30, ETE: 70)**  
**End Term Exam: 3 Hours**

Sr. no.	Topic	No. of Hours
1.	Introduction to Digital Video Camera. How does a digital video Camera work?	8
2.	Parts of Digital Video Camera.	6
3.	Type of Video Camera- Compact, DSLR, Mirrors, Drones, Cinema (Movie Camera), Adventure Camera, Smart Phone.	8
4.	Difference Between (In context of Video):- i.) Compact vs DSLR. ii.) DSLR vs Mirror. iii.) Smart phone VS DSLR Video Camera.	10
5.	Type of Video Camera Shots:- Establishment Shot, Wide Shot, Close-up Shot, Over the Shoulder Shot.	10
6.	Type of Video Camera movement techniques:- Panning, Tilting, Zooming (Zoom In-Out), Trucking.	10

#### Reference Books:

1. The Technique of Television Production, Gerald Millerson Focal press, London, 2001.
2. Digital Cinematography, Paul Wheeler, Focal Press, London. First edition, 2001.
3. An Introduction to digital Video, John Watkinson, Focal Press, London, 1994.



# RAJASTHAN TECHNICAL UNIVERSITY, KOTA

## Scheme & Syllabus

### II Year-IV Semester: Visual Effects

#### 4BVE-03: Fundamentals of Animation & Visual effects (VFX)-II

**Credit: 3**  
**3L+0T+0P**

**Maximum Marks: 100 (IA: 60, ETE: 40)**

Sr. no.	Topic	No. of Hours
1.	Type of Animation Techniques:- i.) Pixilation. ii.) Pin Screen Animation. iii.) Rotoscoping. iv.) Sand animation. v.) Stop motion Animation. vi.) Computer animation (Digital Animation)	10
2.	Principles of Animation:- Squash and Stretch, Anticipation, Staging, Straight ahead and Pose to Pose, follow through and overlapping action, Slow in & out, Arc, Secondary Action, Timing, exaggeration, solid Drawing, appeal.	8
3.	Visual Effects:- i.) What is Miniature Model (Scale Model). ii.) Use of Miniature in early films. iii.) Rear Projection, History of Rear Projection, Rear Projection Techniques.	10
4.	Early Studies and Animation Pioneers:- i.) Walt Disney, Max Fleischer, Warner Bros and Looney Tunes.	8

#### Reference Books:

1. Aspects of animation, steps to learn animated cartoon, Dr. Jiang Tan, Serials Publications Pvt. Ltd.
2. Animation Survival Kit revised edition, Faber; Richard Williams, Main-Revised edition 2009.
3. The Animation book: A complete guide to animated film making, Kit Laybourne and John Canemaker, Three Rivers Press, 1998.
4. Enchanted Drawings: The history of animation, Charles Solomon.
5. The Art of Animation, Bob Thomas.



# RAJASTHAN TECHNICAL UNIVERSITY, KOTA

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### II Year-IV Semester: Visual Effects

#### 4BVE-04: Theory of Graphic Design – II

Credit: 4  
3L+1T+0P

Maximum Marks: 100 (IA: 30, ETE: 70)  
End Term Exam: 3 Hours

Sr. no.	Topic	No. of Hours
1.	Grid:- i.) What is grid in Graphics Designing? ii.) Early history of Grids. iii.) Types of Grid. iv.) Importance of Grids in Graphic Design.	10
2.	Social Media Design:- i.) Social Media. ii.) Social Media Design. iii.) Importance of Graphic Design in Social Media/Social Media Marketing.	8
3.	Image:- i.) What is Bitmap and vector Image? ii.) Bitmap vs Vector Image. iii.) Understanding Image resolution (High & Low)). iv.) Image file format. v.) Type of Image file format (Like JPEG, PNG, GIF, TIFF, PSD, EPS, AI, CDR, RAW.	10
4.	Colour:- i.) RGB and CMYK colour Model (Additive & Subtractive). ii.) RGB vs CMYK. 1. The usage of RGB and CMYK colour models.	11

#### Reference Books:

1. Best Practices for Graphic Designers, Grids and page layout – Amy graver & ben jura.
2. The graphic design Bible by Theo Inglis, publisher -Ilex press.
3. Graphic Design and Reproduction Techniques–Peter Croy.
4. Encyclopedia of Graphics File Formats – James D,murray & William Vanryper.

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### II Year-IV Semester: Visual Effects

#### 4BVE-05: Theory of Advertising- II

**Credit: 3**  
**3L+0T+0P**

**Maximum Marks: 100 (IA: 30, ETE: 70)**  
**End Term Exam: 3 Hours**

Sr. no.	Topic	No. of Hours
1.	Advertising and Promotion:- i.) Direct Marketing. ii.) Sales Promotion. iii.) Personal Selling. iv.) Publicity/Public Relation.	10
2.	Advertising & Marketing:- i.) Define Marketing. ii.) 4Psof Marketing. iii.) Role of Advertising in Marketing.	10
3.	Types of Advertising Media:- i.) Print Media. ii.) Electronic Media. iii.) Direct Mail. iv.) Transit Media. v.) Outdoor Media. vi.) Speciality Advertising. vii.) Digital Media/Online Advertising.	10
4.	Economical Aspect of Advertising.	6

#### Reference Books:

1. Advertising Management Rajeev Batra, John & Myers, David A. Saker.
2. Kleppner's Advertising Process J Thomas, Russell, W. Ronald lane.
3. Advertising -John S. Wright, Daniel S Warner.
4. Foundation of Advertising by Chunawalla & Sethia.
5. Advertising & Sales Promotion - Kazmi & Batra.



# RAJASTHAN TECHNICAL UNIVERSITY, KOTA

## Scheme & Syllabus

### II Year-IV Semester: Visual Effects

#### 4BVE-06: Drawing & Illustration Lab-II

**Credit: 2**  
**0L+0T+4P**

**Maximum Marks: 100 (IA: 60, ETE: 40)**

Sr. no.	Topic
1.	Drawing & Coloring Technique:- i.) Wash Technique in water color (Land Scape). ii.) Mixed Media (Any one composition).
2.	Perspective Drawing:- i.) Linear Perspective (Any topic in pencil/pen & Ink). ii.) Aerial Perspective (Land Scape / country side in water color)
3.	Figure Drawing:- i.) Male and female proportion. ii.) Geometric form of male and female. iii.) Gesture Drawing of Human Head and face with neck in different angles. iv.) Rapid sketches of human figure.

#### Reference Books:

1. Artists and illustrators encyclopedia—John Quick.
2. A manual of painting material and techniques—Mark David Gottsegen.
3. Illustration showcase (American) - American Showcase inc.





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### II Year-IV Semester: Visual Effects

#### 4BVE-07: Video production Lab –I

**Credit: 1.5**  
**0L+0T+3P**

**Maximum Marks: 100 (IA: 60, ETE: 40)**

Sr. no.	Topic
1.	Fundamental of Video Shooting:- i.) Understand the basic function of DSLR/Mirrorless camera for Video Shooting like FPS, Focusing, Exposure (Shutter, aperture, ISO) white Balance.
2.	Type of shots in videography:- i.) Establishing Shot. ii.) Wide shot. iii.) Close-up Shot. iv.) Extreme Close-up Shot. v.) Over the Shoulder Shot. vi.) POV Shot (Point of View).
3.	Camera Movement techniques in Video Shooting:- i.) Panning. ii.) Tilting. iii.) Zooming (Zoom in –Zoom out). iv.) Trucking

#### Reference Books:-

1. Single camera video production by Robert B. Musburger.
2. The DSLR Filmmaker's Hand book by Berry Adersson and Janie L. Geyen.
3. How to shoot video by steve stockman.



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### II Year-IV Semester: Visual Effects

#### 4BVE-08: Graphic design Lab-II

**Credit: 1.5**  
**0L+0T+3P**

**Maximum Marks: 100 (IA: 60, ETE: 40)**

Sr. no.	Topic
1.	Abstract Logo:- i.) Create an abstract logo of any Company/Brand.
2.	Corporate identity Design:- Design Corporate identity on any company/organization/brand. Corporate identity includes logo, logotype, Color palette, graphic, Brand/Corporate name. Implement the above corporate identity design on the following items. i.) Business Card. ii.) Letter Head. iii.) Envelop. iv.) T-Shirt. v.) Cap. vi.) Coffee Mug.  Note: Mockups of above items can be used to implement the Design.

#### Reference Books:

1. Designing Brand Identity Alina Wheeler & Rob Meyerson.
2. Creative Source Wilcord Publication.
3. The Best of Business Card Design Rockport Publication Inc.
4. Graphic Design Narendra Singh Yadav.
5. Practical Graphic Design Technique Ladia Derbyshire.



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#### 4BVE-09: Digital Art Lab – II

**Credit: 2**  
**0L+0T+4P**

**Maximum Marks: 100 (IA: 60, ETE: 40)**

Sr. no.	Topic
1.	Image Editing Software (Any image editing software/open source software).  Study of Tools and command:- i.) Study of Tools like clone stamp tool, pattern tool, Healing Tool. ii.) Dodge, Burn, Smudge, Blur, Sharpen. iii.) Gradient tool and all image colour adjustment command. iv.) All transform tools, their options and command. v.) Pen tool and their options and command.
2.	Study of Layers:- i.) Study of Layer includes layer, Layer Mask, Layer effects and all Layer blending modes.
3.	Study of Filters in Filter Menu.

#### Reference Books:

1. Adobe creative team, Adobe Photoshop CS6 class room in a book, Adobe Press; Mac Win Pa edition, 2012.
2. Martin Evening, Adobe Photoshop CS3 for photo graphers: A Professional image editors guide to the creative use of Photoshop for Macintosh and PC, 2007.
3. The book of GIMP- A Complete Guide to Nearly Everything By Olivier lecarne & Karine Delvare.
4. Beginning Photo Retouching and Restoration Using GIMP by Phillip Whitt.



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#### 4BVE-10: Animation Lab- II

**Credit: 2**  
**0L+0T+4P**

**Maximum Marks: 100 (IA: 60, ETE: 40)**

Sr. no.	Topic
1.	Redraw any two famous cartoon characters (Action poses) by using vector/Bitmap software in color
2.	Animation Drawing:- <ol style="list-style-type: none"><li>1. Sketching of emotions on Face-Draw sad &amp; happy emotions. (Apply on the character created by you).</li><li>2. Sketch a series of Transitioning positions from sad to happy (Face only, apply on the character created by you.)</li><li>3. Bird Flight- 5 Gesture sketches of bird flying which defines that action.</li></ol>

#### Reference Books:

1. Aspects of animation, steps to learn animated cartoon, Dr. Jiang Tan, Serials Publications Pvt. Ltd.
2. Animation Survival Kit revised edition, Faber; Richard Williams, Main - Revised edition 2009.
3. The Animation book: A complete guide to animated film making, Kit Laybourne and John Cane maker, Three Rivers Press, 1998.
4. Enchanted Drawings: The history of animation, Charles Solomon.
5. The Art of Animation, Bob Thomas.
6. Visual Effects and Compositing by JonGress-20October2014.