

## HIGHER NITEC IN ARCHITECTURAL TECHNOLOGY

### COURSE SYNOPSIS

On completion of the course, students should be able to

- Construct architectural drawings
- Develop architectural project presentation
- Execute architectural design process
- Develop architectural design for construction
- Perform BIM Coordination for architectural design
- Apply Green Mark and Universal Design requirements

### JOB OPPORTUNITIES

*HigherNitec* in Architectural Technology graduates are employed by government departments, statutory boards, architectural firms and construction companies. They perform a crucial role of ensuring building plans, working drawings, construction details are produced, in coordination with related building industry disciplines, to meet the needs of the users such as clients, contractors, authorities, consultants, and building occupants, at the different stages of the project. Some of the job titles held by graduates include Architectural Technical Officer, Architectural Technical Coordinator, Architectural Technologist, and Architectural Building Information Modeling (BIM) Specialist.

### CERTIFICATION

Credits required for certification:

Core Modules	:	48
Life Skills Modules	:	9
Elective Modules	:	4
<b>Total</b>	<b>:</b>	<b>61</b>

### COURSE STRUCTURE

Module Title	Credits
<b>CORE MODULE</b>	
Architectural Drawing	6
Architectural Modelling	6
Architectural Design Process	7
Architectural Construction Technology	7
Architectural BIM Design	7
Green Mark and Universal Design	7
Industry Attachment	8
<b>ELECTIVES (COURSE SPECIFIC)</b>	
Architectural Visualisation	2
Visual Perception of Architecture	2
<b>ELECTIVES (GENERAL)</b>	
Refer to pages 277-278	
<b>LIFE SKILLS MODULES</b>	
Refer to page 281	

*Note: The offer of electives is subject to the training schedule of respective ITE Colleges. Students are advised to check with their Class Advisors on the availability of the elective modules they intend to pursue.*

## MODULE OBJECTIVES

### Core Modules

#### Architectural Drawing

On completion of the module, students should be able to apply concepts of spatial composition and knowledge of architectural drawing techniques and conventions to produce architectural sketches, perspectives and architectural building drawings and presentation boards for further design development.

#### Architectural Modelling

On completion of the module, students should be able to produce a consolidated architectural presentation package complete with project brief, presentation drawings, 3D rendering and animations.

#### Architectural Design Process

On completion of the module, students should be able to gather the necessary codes and the necessary codes and regulations to be applied when preparing a set of building drawings for submission purposes using relevant computer software. Students should also be able to apply the knowledge of architectural schedules and detail elements to prepare a set of working drawings for construction.

#### Architectural Construction Technology

On completion of the module, students should be able to produce a set of submission drawings and perform Buildability Score calculations. They should also be able to produce complete sets of architectural tender and construction drawing packages incorporating all required drawings, details, technical specifications and documentation necessary for calling of tender and construction of buildings on site respectively.

#### Architectural BIM Design

On completion of the module, students should be able to integrate building services and structural systems with the architectural design using BIM modelling. They should be able to perform multi-disciplinary coordination and clash detection through usage of BIM software.

#### Green Mark and Universal Design

On completion of the module, students should be able to apply the principles and requirements of Green Mark to develop detail elements and features of sustainable building and produce a set of detail drawings. Students should also be able to apply the principles and requirements of Universal Design to develop design features for accessibility in built environment and produce a set of detail drawings.

#### Industry Attachment

Students will undergo a 6-month industry attachment with architectural design and building and construction companies where they will apply and integrate the technical, social and methodological competencies in carrying out related industry projects.

#### Electives (Course Specific)

##### Architectural Visualisation

On completion of the module, students should be able to produce rendered still images and video walk-through of three-dimensional building models using appropriate software and technology.

##### Visual Perception of Architecture

On completion of the module, students should be able to relate the various styles and periods in architecture and demonstrate relevant principles to achieve visual balance and visual order in architectural compositions.

#### Electives (General)

As reflected on pages 277-278.

#### Life Skills Modules

As reflected on page 281.

## HIGHER NITEC IN FILMMAKING (CINEMATOGRAPHY)

### COURSE SYNOPSIS

On completion of the course, students should be able to

#### Camera

- Perform camera assisting
- Perform camera operations
- Perform data wrangling

#### Lighting

- Perform lighting setups
- Assist in the lighting requirements

#### Grip

- Perform dolly operations
- Perform jib arm operations

#### Audio

- Perform sound recording

#### Post-production

- Perform Video Editing

#### Production

- Assist in production management
- Coordinate production requirements

#### Art

- Assist in the art department

### JOB OPPORTUNITIES

*Higher Nitec* in Filmmaking (Cinematography) graduates can develop their careers with Film/TV production companies. Some of the job titles held by graduates include Camera Operator, Camera Assistant, Focus Puller, Drone Operator, Data Wrangler, Lighting Crew, Grip, Sound Recordist and Post-Production Assistant. There are excellent opportunities for career advancement to supervisory positions in areas such as Production Management, Camera Operations, Lighting and Grip Department.

### CERTIFICATION

Credits required for certification:

Core Modules	:	50
Life Skills Modules	:	10
Elective Modules	:	4
Total	:	64

### COURSE STRUCTURE

Module Title	Credits
<b>CORE MODULE</b>	
Filmmaking Fundamentals	7
Camera Technology	7
Production Coordination and Post	6
Camera Movement and Lighting	6
Production Aesthetics and Lighting	7
Techniques	
Applied Cinematography	7
Project	6
Industry Attachment	4
<b>ELECTIVES (COURSE SPECIFIC)</b>	
Audio for Video	2
<b>ELECTIVES (GENERAL)</b>	
Refer to pages 277-278	
<b>LIFE SKILLS MODULES</b>	
Refer to page 281	

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## MODULE OBJECTIVES

### Core Modules

#### Filmmaking Fundamentals

On completion of the module, students should be able to identify filmmaking processes and evaluate visual storytelling techniques. They will also acquire non-linear editing skills to create coherent storytelling structures with the footages.

#### Camera Technology

On completion of the module, students should be able to determine production equipment requirements and acquire the skills sets of setting up interchangeable lens camera system with essential peripherals for media recording. This module covers the key aspects of camera assisting for digital film production.

#### Production Coordination and Post

On completion of the module, students should be able to carry out script breakdown, plan production budgets and schedules, coordinate technical and logistical requirements for principle photography and carry out post production.

#### Camera Movement and Lighting

On completion of the module, students should be able to set up lighting equipment, operate camera, set up and operate camera movement systems. This module covers the key aspects of gripping and lighting techniques in film production.

#### Production Aesthetics and Lighting Techniques

On completion of the module, students should be able to prepare and assist the art department in set and location aesthetic requirements. They should also learn the necessary lighting techniques to carry out scene lighting to achieve the required cinematic look.

#### Applied Cinematography

On completion of the module, students should be able to apply cinematography techniques in specialised camera systems and lighting rigs. They should be able to support the cinematographer in camera and lighting operations to meet the requirements of the dramatic content.

#### Project

On completion of the module, students should be able to plan, produce, shoot and edit their final year project to create a portfolio that will demonstrate their creative and technical competences.

#### Industry Attachment

On completion of the module, students should be able to integrate and apply the knowledge and skills that they have acquired and develop competencies in other areas at the workplace.

#### Electives (Course Specific)

##### Audio for Video

On completion of the module, students should be able to apply the knowledge and skills of audio production for video, which includes the ability to employ the right type of microphones, carry out microphone placement techniques, record audio signals, identify different audio formats, and perform audio editing and mixing. The students should also be able to apply basic audio filters and effects for video post-production.

##### Electives (General)

As reflected on pages 277-278.

##### Life Skills Modules

As reflected on page 281.

## HIGHER NITEC IN INTERACTIVE DESIGN

### COURSE SYNOPSIS

On completion of the course, students should be able to

- Produce drawing.
- Produce design artwork.
- Conceptualize web design.
- Design user interface.
- Create digital images.
- Create web animations.
- Manipulate videos.
- Create audio assets.
- Integrate websites.
- Develop portfolio presentation.

### JOB OPPORTUNITIES

*Higher Nitec* in Interactive Design graduates can develop their careers in any of the following industries:

- Rich Media & Publishing sub-sector of the Interactive Digital
- Media (IDM) sector
- Advertising
- Graphic Design
- Publishing & Printing

Some of the job titles held by graduates include:

- Desktop Artist / FA Artist
- Graphic Designer
- Layout Artist/Designer
- Visualiser

There are excellent opportunities for career advancement to higher positions. The typical career progression path for an Interactive Media Designer/Specialist could include:

Designer → Senior Designer → Associate Design Director  
→ Design Director → Creative Director

### CERTIFICATION

Credits required for certification:

Core Modules	:	53
Life Skills Modules	:	10
Elective Modules	:	4
<b>Total</b>	<b>:</b>	<b>67</b>

### COURSE STRUCTURE

Module Title	Credits
<b>CORE MODULE</b>	
Visual Design Principles	7
Digital Photography and Imaging	7
Interactive User Experience Design	7
Digital Content Design	7
Web Design and Development	7
Interactive Design Portfolio	7
Responsive Web Design for Application	7
Industry Attachment	4
<b>ELECTIVES (COURSE SPECIFIC)</b>	
Infographic Design	2
Screen Typography	2
<b>ELECTIVES (GENERAL)</b>	
Refer to pages 277-278	
<b>LIFE SKILLS MODULES</b>	
Refer to page 281	

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## MODULE OBJECTIVES

### Core Modules

#### Visual Design Principles

On completion of the module, students should be able to apply basic drawing skills and foundation in design.

#### Digital Photography and Imaging

On completion of the module, students should be able to acquire and manipulate digital images for various outputs; print and web platforms.

#### Interactive User Experience Design

On completion of the module, students should be able to apply the user interface design process and demonstrate understanding of the fundamentals and use of typography for web.

#### Digital Content Design

On completion of the module, students should be able to integrate digital media such as audio and video elements, animation and other media formats into user centred experience.

#### Web Design and Development

On completion of the module, students should be able to apply the fundamentals of web development using hypertext mark-up language (HTML) and cascading style sheets (CSS).

#### Interactive Design Portfolio

On completion of the module, students should be able to develop and market interactive portfolio.

#### Responsive Web Design for Application

On completion of the module, students should be able to apply responsive design framework such as flexible grids and layouts, images and an intelligent use of HTML5, Javascript and CSS3 media queries.

#### Industry Attachment

On completion of the module, students should be able to apply practical knowledge and skills acquired in industry project and gain relevant work experience.

#### Electives (Course Specific)

##### Infographic Design

On completion of the module, students should be able to convert complicated information including facts, data and references into comprehensive and appealing visual infographic presentations.

##### Screen Typography

On completion of this module, students should be able to apply good typography practices to create visually appealing and highly usable type for screen.

#### Electives (General)

As reflected on pages 277-278.

#### Life Skills Modules

As reflected on page 281.

## HIGHER NITEC IN MOTION GRAPHICS

### COURSE SYNOPSIS

On completion of the course, students should be able to

- Plan production work
- Perform non-linear editing
- Develop 2D and 3D assets
- Create animation
- Perform video compositing

### JOB OPPORTUNITIES

*Higher Nitec* in Motion Graphics graduates are employed by companies in the post-production, broadcasting, film, games, design and media sectors. They perform work involving the creation of graphics, animation and live video content for a diverse array of media, including smartphones, handheld electronic devices, the web and television.

Some of the job titles held by graduates at entry level include Broadcast Graphics Artist, Animator, Video Editor and Broadcast Designer. There are excellent opportunities for career advancement to higher positions.

The typical career progression path for a motion graphics graduate could include:

Junior Broadcast Designer → Senior Broadcast Designer  
 → Lead Artist → Head of Production

### CERTIFICATION

Credits required for certification:

Core Modules	:	52
Life Skills Modules	:	10
Elective Modules	:	4
<b>Total</b>	:	<b>66</b>

### COURSE STRUCTURE

Module Title	Credits
<b>CORE MODULE</b>	
Digital Imaging Essentials	7
Design Principles	7
Motion Design	7
3D Fundamentals	7
Finishing for Motion Graphics	7
3D for Motion Graphics	7
Motion Graphics Portfolio	6
Industry Attachment	4
<b>ELECTIVES (GENERAL)</b>	
Refer to pages 277-278	
<b>LIFE SKILLS MODULES</b>	
Refer to page 281	

*Note: The offer of electives is subject to the training schedule of respective ITE Colleges. Students are advised to check with their Class Advisors on the availability of the elective modules they intend to pursue.*

## MODULE OBJECTIVES

### Core Modules

#### Digital Imaging Essentials

On completion of the module, students should be able to create graphics and illustrations using digital imaging software. Students will also be able to digitally manipulate and retouch images according to the specific styles required.

#### Design Principles

On completion of the module, students should be able to apply design elements like form, shapes, lines, colour, and type into compositions that creatively expresses their ideas. Their compositions should demonstrate knowledge of design principles effectively.

#### Motion Design

On completion of the module, students should be able to apply their graphics creation to the dimension of time, animation, keyframing and movement. Their compositions should demonstrate knowledge of animation principles in two-dimensional styles and three-dimensional imagery.

#### 3D Fundamentals

On completion of the module, students should be able to create 3D elements for the media. This module covers the creation of 3D elements and exporting into the appropriate file format.

#### Finishing for Motion Graphics

On completion of the module, students should be able to manipulate 2D/3D layers, video footage and apply appropriate animation to create the motion graphics. This module covers the fundamentals of layout and compositing techniques.

#### 3D for Motion Graphics

On completion of the module, students should be able to create 3D animation using simulation and particle techniques. The module covers the techniques and workflow in creating dynamic effects animation.

#### Motion Graphics Portfolio

On completion of the module, students should be able to apply creative process to derive design concept to meet the project's requirements.

#### Industry Attachment

On completion of the module, students should be able to apply and integrate the skills and knowledge that they have acquired to the industry and would have gained relevant work experience.

#### Electives (General)

As reflected on pages 277-278.

#### Life Skills Modules

As reflected on page 281.



## HIGHER NITEC IN PERFORMANCE PRODUCTION

### COURSE SYNOPSIS

On completion of the course, students should be able to

- Assist to manage the production backstage
- Assist to set up and operate the lighting, sound, multimedia and staging systems
- Interpret production documents
- Coordinate scenic arts, props and sets

### JOB OPPORTUNITIES

*Higher Nitec* in Performance Production graduates are employed by theatre venues, technical production houses, audio visual companies, live concert organisers, event organisers and etc. Some of the job titles held by graduates include Performance Production Assistant, Lighting and Sound Crew, Technician (Stage, Concert & Studio), and Event Technical Crew.

### CERTIFICATION

Credits required for certification:

Core Modules	:	52
Life Skills Modules	:	10
Elective Modules	:	4
<b>Total</b>	:	<b>66</b>

### COURSE STRUCTURE

Module Title	Credits
<b>CORE MODULE</b>	
Performance Production Management	7
Lighting for Production I	6
Sound for Production I	6
Stage Craft and Staging Systems	8
Visual Multimedia	7
Lighting for Production II	7
Sound for Production II	7
Industry Attachment	4
<b>ELECTIVES (COURSE SPECIFIC)</b>	
Stage Effects	2
<b>ELECTIVES (GENERAL)</b>	
Refer to pages 277-278	
<b>LIFE SKILLS MODULES</b>	
Refer to page 281	

*Note: The offer of electives is subject to the training schedule of respective ITE Colleges. Students are advised to check with their Class Advisors on the availability of the elective modules they intend to pursue.*

## MODULE OBJECTIVES

### Core Modules

#### Performance Production Management

On completion of the module, students should be able to identify the various performing disciplines and recognise the industry etiquettes and practices. They should also assist in managing and executing various responsibilities leading to a production.

#### Lighting for Production I

On completion of the module, students should be able to interpret lighting document, set up and operate lighting equipment and systems in accordance with work safety and health requirements and regulations.

#### Sound for Production I

On completion of the module, students should be able to interpret sound document, set up and operate sound system and equipment in accordance with work safety and health requirements and regulations.

#### Stage Craft and Staging Systems

On completion of the module, students should be able to interpret staging and set documents, set up, test and operate staging systems in accordance with work safety and health requirements and regulations. They should also be able to fabricate the necessary items in line with the creative direction of the performance production.

#### Visual Multimedia

On completion of the module, students should be able to set up, test and program visual multimedia equipment in accordance with work safety and health requirements and regulations.

#### Lighting for Production II

On completion of the module, students should be able to execute programming of the lighting desk, use lighting software to create lighting effects and documents for a performance production. They should also be able to maintain lighting equipment and system.

#### Sound for Production II

On completion of the module, students should be able to mic up for any type of band set up, operate sound console, use sound software to edit and record sound for a performance production. They should also be able to maintain sound equipment and system.

#### Industry Attachment

On completion of the module, students should be able interpret production documents, set up and operate the production systems, assist in backstage management so as to ensure efficient and smooth running of a production in accordance with the company's standards and practices.

#### Electives (Course Specific)

##### Stage Effects

On completion of the module, students should be able to illustrate and set up stage effects equipment in accordance with work safety and health requirements and regulations.

##### Electives (General)

As reflected on pages 277-278.

##### Life Skills Modules

As reflected on page 281.

## HIGHER NITEC IN VISUAL EFFECTS

### COURSE SYNOPSIS

On completion of the course, students should be able to

- Plan production work
- Develop 3D assets
- Perform lighting and rendering
- Create mattes
- Perform effects simulation
- Perform rotoscoping
- Perform video compositing

### JOB OPPORTUNITIES

*Higher Nitec* in Visual Effects graduates are employed by companies in the post-production, broadcasting, film, games, design and media sectors. They perform work involving video editing, 3D modeling and lighting, rotoscoping, matchmoving and compositing. Some of the job titles held by graduates at entry level include Digital Matte Painter, Video Editor, Roto Artist, Matchmovers Junior Compositor and Junior Visual Effects Artist.

There are excellent opportunities for career advancement to supervisory positions and beyond.

The typical career progression path for a Visual Effects artist could include:

Junior Visual Effects Artist → Senior Visual Effects Artist  
 → CG Supervisor → Technical Director

### CERTIFICATION

Credits required for certification:

Core Modules	:	52
Life Skills Modules	:	10
Elective Modules	:	4
<b>Total</b>	<b>:</b>	<b>66</b>

### COURSE STRUCTURE

Module Title	Credits
<b>CORE MODULE</b>	
Digital Effects Essentials	7
3D Modeling	7
Texturing, Lighting and Rendering	7
Digital Sculpting	7
Matchmoving and Rotoscoping	7
Dynamic FX	7
Compositing	6
Industry Attachment	4
<b>ELECTIVES (GENERAL)</b>	
Refer to pages 277-278	
<b>LIFE SKILLS MODULES</b>	
Refer to page 281	

*Note: The offer of electives is subject to the training schedule of respective ITE Colleges. Students are advised to check with their Class Advisors on the availability of the elective modules they intend to pursue.*

## MODULE OBJECTIVES

### Core Modules

#### Digital Effects Essentials

On completion of the module, students should be able to apply the workflow of production techniques based on industry workflow. This module covers the creation of fundamental of 3D modelling, lighting, rendering and compositing.

#### 3D Modelling

On completion of the module, students should be able to create hard surface and organic 3D elements. This module covers the creation of 3D elements and renders them into the appropriate file format.

#### Texturing, Lighting and Rendering

On completion of the module, students should be able to produce apply good techniques of texturing and lighting. They should also be able to perform rendering of photo realistic Computer Graphics scene.

#### Digital Sculpting

On completion of the module, students should be able to create detailed 3D model using advanced sculpting tools and techniques. They should also be able to perform complex surface details and rendering.

#### Matchmoving and Rotoscoping

On completion of the module, students should be able to create 2D/3D camera tracking effectively and integrating live action footage with computer graphic elements. They should also be able to perform compositing and apply the techniques of rotoscoping and matte extraction.

#### Dynamic FX

On completion of the module, students should be able to apply the techniques and workflow in creating dynamic visual effects animation.

#### Compositing

On completion of the module, students should be able to perform video compositing by applying techniques such compositing visual elements, colour correction and grading.

#### Industry Attachment

On completion of the module, students should be able to apply and integrate the skills and knowledge that they have acquired to the industry and would have gained relevant work experience.

#### Electives (General)

As reflected on pages 277-278.

#### Life Skills Modules

As reflected on page 281.

## HIGHER NITEC IN VISUAL MERCHANDISING

### COURSE SYNOPSIS

On completion of the course, students should be able to

- Keep up with retail market trend to ensure that the display is current and congruent with trend and store image.
- Develop visual display plan.
- Execute visual display plan.
- Create appealing display environment.
- Create signage and graphics.
- Produce props.
- Maintain retail display.

### JOB OPPORTUNITIES

*Higher Nitec* in Visual Merchandising graduates are employed by the retail or service establishments, such as department stores, shopping malls, and specialty stores. They perform a crucial role in ensuring that the window and in-store displays are designed and implemented according to market and fashion trends. Some of the job titles held by graduates include Visual Merchandiser, Display Artist, Retail Stylist and Visual Exhibition Designer. There are excellent opportunities for career advancement to supervisory positions and beyond.

### CERTIFICATION

Credits required for certification:

Core Modules	:	48
Life Skills Modules	:	10
Elective Modules	:	6
<b>Total</b>	<b>:</b>	<b>64</b>

### COURSE STRUCTURE

Module Title	Credits
<b>CORE MODULE</b>	
Arts and Design	6
Communication at Work	7
Visual Merchandising Graphics	6
Retail Marketing	7
Visual Merchandising Design	6
Retail Space Design	6
Applied Visual Merchandising	6
Industry Attachment	4
<b>ELECTIVES (GENERAL)</b>	
Refer to pages 277-278	
<b>LIFE SKILLS MODULES</b>	
Refer to page 281	

*Note: The offer of electives is subject to the training schedule of respective ITE Colleges. Students are advised to check with their Class Advisors on the availability of the elective modules they into to pursue.*

## MODULE OBJECTIVES

### Core Modules

#### Arts and Design

On completion of the module, students should be able to apply the fundamental drawing techniques to express their perception of forms using various mediums. They should also be able to apply design elements and principles into compositions that creatively express their ideas.

#### Communication at Work

On completion of the module, students should be able to handle oral and written communication effectively in a workplace environment as well as in any social and business settings.

#### Visual Merchandising Graphics

On completion of the module, students should be able to apply different types of material used and the application of visual graphics to affect consumer's choice. Students should also be able to apply the basic knowledge of drawing and editing software to create and retouch graphics for the production of signage and graphics.

#### Retail Marketing

On completion of the module, students should be able to apply the core principles and practices of marketing in a retail context and to identify the retail marketing mix, consumer buying behaviour, current retail trends and strategies.

#### Visual Merchandising Design

On completion of the module, students should be able to apply display techniques to the design of the product presentation that is cohesive with marketing strategies. Students should also be able to make use of environment, lighting, fixtures and forms to enhance the presentation.

#### Retail Space Design

On completion of the module, students should be able to apply the knowledge of space design, retail space techniques and principles to reinforce branding and enhance retail experiences.

#### Applied Visual Merchandising

On completion of the module, students should be able to analyse the current presentation practices and techniques, methodology, themes and inherent qualities of varying classifications of merchandise and translate them into studio setups which include propping and showcase display.

#### Industry Attachment

Students will undergo a 3-month attachment in visual merchandising industry or work on an industry-based project. On completion of the module, students will gain experience and insights in the working environment. Students will apply the principles and elements of visual merchandising to conceptualise and execute a visual merchandising design. Students should be able to develop action plan, determine resources to carry out the plan and present their work confidently within the stated timelines.

#### Electives (General)

As reflected on pages 277-278.

#### Life Skills Modules

As reflected on page 281.

## NITEC IN ARCHITECTURAL TECHNOLOGY

### COURSE SYNOPSIS

On completion of the course, students should be able to

- Produce design drawings
- Produce building CAD drawings
- Construct architectural space model
- Develop architectural space planning and design
- Develop architectural design proposal
- Generate architectural construction drawings and detailing
- Generate architectural submission package

### JOB OPPORTUNITIES

Nitec in Architectural Technology graduates are employed by government departments, statutory boards and private companies in the building and construction sector. Some of the job titles held by graduates include Architectural Technical Coordinator, Architectural Technician, and Technical Assistant. There are excellent opportunities for career advancement to supervisory positions.

### CERTIFICATION

Credits required for certification:

Core Modules	:	48
Life Skills Modules	:	10
Elective Modules	:	4
<b>Total</b>	<b>:</b>	<b>62</b>

### COURSE STRUCTURE

Module Title	Credits
<b>CORE MODULE</b>	
Spatial Visualisation Drawing	6
Building CAD Drawing	6
BIM Presentation	6
Architectural Spatial Planning	6
Architectural Design and Visualisation	7
Building Construction and Drawing	6
Architectural Submissions	7
Industry Attachment	4
<b>ELECTIVES (COURSE SPECIFIC)</b>	
Model Making	2
Prefabricated Construction Drawing	2
Construction Quality Assessment System	2
<b>ELECTIVES (GENERAL)</b>	
Refer to pages 279-281	
<b>LIFE SKILLS MODULES</b>	
Refer to page 281	

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## MODULE OBJECTIVES

### Core Modules

#### Spatial Visualisation Drawing

On completion of the module, students should be able to apply the principles of drawing and composition to produce basic sketches, orthographic drawings, and perspective drawings with scale and proportion.

#### Building CAD Drawing

On completion of the module, students should be able to apply the knowledge of orthographic drawing and architectural drawing conventions to prepare a set of building drawings using relevant computer software.

#### BIM Presentation

On completion of the module, students should be able to construct a 3D building model complete with architectural elements and finishes using relevant BIM software.

#### Architectural Spatial Planning

On completion of the module, students should be able to apply principles of architectural space planning to develop zoning plans of different types of building developments and produce a set of building drawings.

#### Architectural Design and Visualisation

On completion of the module, students should be able to apply the knowledge of current building regulations to develop building design and construct 3D model, complete with architectural elements and finishes, and complying with relevant regulatory requirements.

#### Building Construction and Drawing

On completion of the module, students should be able to apply the knowledge of current building regulations and applicable construction technologies to prepare sets of building construction drawings and detail drawings of various building components.

#### Architectural Submissions

On completion of the module, students should be able to apply knowledge of current relevant authority requirements to generate BIM models and documentation for submission to local regulatory authorities.

#### Industry Attachment

On completion of the module, students should be able to apply and integrate the technical, social and methodological competencies in carrying out related industry project.

#### Electives (Course Specific)

##### Model Making

On completion of the module, students should be able to construct an architectural/interior/exhibition presentation model.

##### Prefabricated Construction Drawing

On completion of the module, students should be able to draw simple structural system illustrative drawings of connecting joints for prefabricated components, which include preliminary and general design consideration.

##### Construction Quality Assessment System

On completion of the module, students should be equipped with knowledge and skills in quality management of construction projects to achieve better Conquas score.

#### Electives (General)

As reflected on pages 279-281.

#### Life Skills Modules

As reflected on page 281.



## NITEC IN DIGITAL ANIMATION

### COURSE SYNOPSIS

On completion of the course, students should be able to

- Assist the story artist with the research on pre-production in the art department.
- Assist the character designer by generating character design ideas and creating model sheets and poses.
- Produce the costumes, props and accessories for the characters and set design.
- Assist the character designer by producing the colour style or palette for the character models and set design.
- Assist the background artist by preparing the background design by digital painting.
- Assist the story artist by producing the storyboard thumbnails and animatics or story reel.
- Assist the animators to produce animation tests.
- Produce the 3D assets, shaders, textures and elements that are required for a 3D production.
- Assist the lighting & compositing artist to perform 3D lighting.
- Assist the character animator by creating rigs and props.

### JOB OPPORTUNITIES

Nitec in Digital Animation graduates are employed in various fields, including new media studios, film production houses, games and media sectors. Some of the job titles held by graduates include Computer Graphic (CG) Artist, Junior Animator, Junior Modeller, Junior Concept Artist, Junior Character Designer and Junior Storyboard Artist. There are excellent opportunities for career advancement to character animator positions and beyond.

### CERTIFICATION

Credits required for certification:

Core Modules	:	34
Specialisation Modules	:	14
Life Skills Modules	:	10
Elective Modules	:	6
<b>Total</b>	<b>:</b>	<b>64</b>

### COURSE STRUCTURE

Module Title	Credits
<b>CORE MODULE</b>	
Drawing	6
Classical Animation Principles	8
Animation Design and Layout	6
Essentials of 3D Animation	5
Storyboard	5
Industry Attachment	4
<b>SPECIALISATION MODULES</b>	
<b>Group A (Asset Creation)</b>	
Asset Creation	8
Asset Creation Portfolio	6
<b>OR</b>	
<b>Group B (3D Animation)</b>	
3D Animation	8
3D Animation Portfolio	6
<b>ELECTIVES (COURSE SPECIFIC)</b>	
Clay Sculpting	3
Introduction to Post Production	3
Gesture Drawing for Animation	3
<b>ELECTIVES (GENERAL)</b>	
Refer to pages 279-281	
<b>LIFE SKILLS MODULES</b>	
Refer to page 281	

*Note: The offer of electives is subject to the training schedule of respective ITE Colleges. Students are advised to check with their Class Advisors on the availability of the elective modules they intend to pursue.*

## MODULE OBJECTIVES

### Core Modules

#### Drawing

On completion of the module, students should be able to apply the fundamentals of drawing skills, composition and its techniques for the creation of still life drawing, figure drawing, perspective, and gesture drawing for characters.

#### Classical Animation Principles

On completion of the module, students should be able to apply the principles of classical animation to the drawing of key poses in action. They are able to develop drawing skills specifically for animation through hands-on experience in performing in-betweens and gain knowledge of spacing and timing. They are able to animate using key poses, cut-out animation and character animation based on a dialogue with body mechanics, gestures, lip synch, and facial expressions. They are also trained on advanced animation principles utilizing acting to enhance the performance of the characters being animated via experimental animation.

#### Animation Design and Layout

On completion of the module, students should be able to apply the basic principles of form, composition, shapes and colour to create key layout and background designs. They are also trained in the creative processes for content creation in digital animation such as character and background designs, costume, accessories and props, etc. They are also trained to create background colour scheme, render background art and colour grading of background art.

#### Essentials of 3D Animation

On completion of the module, students should be able to perform basic 3D asset creation involving modelling, texturing, rigging, lighting and rendering. They are also taught the basic 3D animation such as body mechanics, animation rigs and facial animation. At the end of the module, the students will understand the entire 3D production workflow.

#### Storyboard

On completion of the module, students should be able to break down a script and develop it into a series of images that tells a story. They are also trained on the functions of a storyboard staging with background art and on transforming the series of images into an animatic with appropriate timing applied.

#### Industry Attachment

On completion of the module, students should be able to apply and integrate the technical, social and methodological competencies in carrying out related industry project and handle project management, perform production-related tasks within a given deadline.

### Specialisation Modules

#### Group A (Asset Creation)

##### Asset Creation

On completion of the module, students should be able to perform the various stages of 3D asset creation, namely surface and polygonal modelling, creating textures and shaders, painting weights and rigs, 3D lighting and rendering. They are also taught via hands-on training in processes revolving the 3D environment. At the end of the module, the students apply the acquired technical knowledge to create a series of 3D rendered images.

##### Asset Creation Portfolio

On completion of the module, students should be able to apply all the acquired knowledge throughout the course to produce a 3D asset demo reel such as 3D model turntable, character and creature models, 3D props, hard surface and soft surface assets in their portfolio. Students are also trained to prepare their 3D portfolio for future interview materials.

#### Group B (3D Animation)

##### 3D Animation

On completion of the module, students should be able to animate according to a style and a particular staging. They are also trained in character animation, namely body mechanics, acting for animation and lip sync. At the end of the module the students apply the acquired technical knowledge to create a series of 3D animated shots.

##### 3D Animation Portfolio

On completion of the module, students should be able to apply all the acquired knowledge throughout the course to produce a 3D animation reel of character animation using advanced body mechanics, pantomime, and facial animation with lip sync. Students are also trained to prepare their 3D portfolio for future interview materials.

## **Electives (Course Specific)**

### **Clay Sculpting**

On completion of the module, students should be able to design and construct characters based on the given human, animal or inanimate subjects. They should be able to develop a background history of their characters. The students are also trained on the function of a model sheet, to create different views of their character design and apply colours to them. They will then go hands-on to reproduce their 2D design into a 3D sculpted art work.

### **Introduction to Post Production**

On completion of the module, students should be able to identify the flow of video, and use basic video/ audio editing and compositing techniques such as applying various cuts, transitions, music, sound effects and text effects to package their animation for an audience.

### **Gesture Drawing for Animation**

On completion of the module, students should be able to do quick sketches of key poses of life characters, with emphasis on the line quality of the human poses or gestures. Students are trained to apply the line of action, weight, structure, volume, balance, rhythm, and proportion in their short sketches.

### **Electives (General)**

As reflected on pages 279-281.

### **Life Skills Modules**

As reflected on page 281.

## NITEC IN FASHION APPAREL PRODUCTION & DESIGN

### COURSE SYNOPSIS

On completion of the course, students should be able to

- Construct a garment.
- Evaluate sample for fit (alteration).
- Develop draft patterns for an outfit.
- Analyse fabric characteristics.
- Drape to create 3D garment.
- Translate 2D illustration.
- Identify industry sewing machine faults.
- Perform quality control.

### JOB OPPORTUNITIES

Nitec in Fashion Apparel Production & Design graduates are employed in fashion houses, department stores and apparel manufacturers. Graduates can pursue careers in the areas of sample creation, apparel production, merchandising, retail and fashion design. Some of the job titles held by graduates include Prototype Maker, Pattern Maker and Sample Sewer.

### CERTIFICATION

Credits required for certification:

Core Modules	:	46
Life Skills Modules	:	10
Elective Modules	:	4
<b>Total</b>	<b>:</b>	<b>60</b>

### COURSE STRUCTURE

Module Title	Credits
<b>CORE MODULE</b>	
Fashion Visualisation	6
Apparel Construction for Women's Wear	6
Textile Fundamentals	6
Apparel Construction for Menswear	6
3D Draping Creation	6
Fashion Design Practice	6
Fashion Production	6
Industry Attachment	4
<b>ELECTIVES (INTER-DISCIPLINARY)</b>	
Print Making Fundamentals	2
<b>ELECTIVES (GENERAL)</b>	
Refer to pages 279-281	
<b>LIFE SKILLS MODULES</b>	
Refer to page 281	

*Note: The offer of electives is subject to the training schedule of respective ITE Colleges. Students are advised to check with their Class Advisors on the availability of the elective modules they intend to pursue.*

## MODULE OBJECTIVES

### Core Modules

#### Fashion Visualisation

On completion of the module, students should be able to apply the skills and knowledge of creative and practical processes in design development and presentation used in the fashion industry. They should be able to produce and present fashion sketching and technical drawings through digital imaging software.

#### Apparel Construction for Women's Wear

On completion of the module, students should be able to create a three-dimensional garment from a two-dimensional design that shapes and fits well on a female moving body. They will be able to apply a wide range of pattern making and garment production techniques in making woven items such as skirts, dresses, pants, jackets and gowns.

#### Textile Fundamentals

On completion of the module, students should be able to perform a variety of testing on fibres, yarns and garments in order to select the most appropriate fabric for the end-use of the garment. Students should also be able to create interesting textures on fabric through various surface treatment by applying hand stitch and machine stitch methods.

#### Apparel Construction for Menswear

On completion of the module, students should be able to produce menswear garments for various occasions. They will be able to make pattern draft and construct for menswear such as shirts, trousers, vest and jackets. Students should also be able to manage specialised sewing machines for construction of knit wear items.

#### 3D Draping Creation

On completion of the module, students should be able to manipulate, mould and shape fabrics until the design is simulated in a three-dimensional form. The finished draped garment is further translated into flat patterns for mass production.

#### Fashion Design Practice

On completion of the module, students should be able to adopt a personal approach to fashion design through the generation of ideas using a range of research skills and creative techniques. In the development process, students will interpret research findings to create a theme-based fashion collection.

#### Fashion Production

On completion of the module, students should be able to apply appropriate technical skills in producing a range of garments of a theme-based fashion collection. They will also be able to enhance quality standards of the garments by refining workmanship in garment construction, fitting and alteration.

#### Industry Attachment

Students will undergo a 3-month attachment in apparel production industry or work on an industry-based project. On completion of the module, students will gain experience and insights in the working environment. Students will integrate and extend their skills and knowledge in the working environment. Students should be able to perform research for design references, identify resources and present their work confidently within the stated timelines.

#### Electives (Inter-disciplinary)

##### Print Making Fundamentals

On completion of the module, students should be able to perform duplication techniques as an art medium and to explore their creativity using texture.

#### Electives (General)

As reflected on pages 279-281.

#### Life Skills Modules

As reflected on page 281.

## NITEC IN INTERIOR & EXHIBITION DESIGN

### COURSE SYNOPSIS

On completion of the course, students should be able to

- Produce design drawings
- Produce building CAD drawings
- Produce interior space modelling
- Develop interior space planning and design
- Develop interior design proposal
- Generate interior construction and furnishing
- Examine interior design portfolio

### JOB OPPORTUNITIES

*Nitec* in Interior & Exhibition Design graduates are employed by government departments, statutory boards and private companies in the building and construction sector. They perform a crucial role of ensuring the layout plans, construction drawings, presentation drawings, illustrations and graphics are produced for tenders, and construction, and presentation packages for communicating designer's concepts and ideas to clients. Some of the job titles held by graduates include Interior Designer, Junior Designer, and Assistant Exhibition Designer. There are excellent opportunities for career advancement to supervisory positions.

### CERTIFICATION

Credits required for certification:

Core Modules	:	48
Life Skills Modules	:	10
Elective Modules	:	4
Total	:	62

### COURSE STRUCTURE

Module Title	Credits
<b>CORE MODULE</b>	
Spatial Visualisation Drawing	6
Building CAD Drawing	6
Interior Space Modelling	6
Space Planning and Design	7
Interior Design Proposal	6
Construction and Detailing	7
Interior Design Portfolio	6
Industry Attachment	4
<b>ELECTIVES (COURSE SPECIFIC)</b>	
Model Making	2
Prefabricated Construction Drawing	2
Construction Quality Assessment System	2
<b>ELECTIVES (GENERAL)</b>	
Refer to pages 279-281	
<b>LIFE SKILLS MODULES</b>	
Refer to page 281	

*Note: The offer of electives is subject to the training schedule of respective ITE Colleges. Students are advised to check with their Class Advisors on the availability of the elective modules they intend to pursue.*

## MODULE OBJECTIVES

### Core Modules

#### Spatial Visualisation Drawing

On completion of the module, students should be able to apply the principles of drawing and composition to produce basic sketches, orthographic drawings, and perspective drawings with scale and proportion.

#### Building CAD Drawing

On completion of the module, students should be able to apply the knowledge of orthographic drawing and architectural drawing conventions to prepare a set of building drawings using relevant computer software.

#### Interior Space Modelling

On completion of the module, students should be able to use digital skills and knowledge to create an interior space model with a colour scheme, appropriate lighting application as well as material and finishes.

#### Space Planning and Design

On completion of the module, students should be able to produce interior space planning and layout with the knowledge of spatial as well as work requirements of interior spaces.

#### Interior Design Proposal

On completion of the module, students should be able to develop, design and produce an interior design proposal with a concept/theme as well as application of materials, furniture, fixtures and colour.

#### Construction and Detailing

On completion of the module, students should be able to prepare fundamental set of construction drawings, select construction details and furniture, furnishing and equipment specifications for selected interior spaces.

#### Interior Design Portfolio

On completion of the module, students are exposed to various types and requirements of interior spaces, as well as recognise some key design issue, problems and intent use to address design of interior spaces.

#### Industry Attachment

Students will undergo a 3-month industry attachment with building construction and design companies where they will apply learned skills related to the planning, design, construction and presentation of interior spaces in a real work environment.

#### Electives (Course Specific)

##### Model Making

On completion of the module, students should be able to construct an architectural/interior/exhibition presentation model.

##### Prefabricated Construction Drawing

On completion of the module, students should be able to draw simple structural system illustrative drawings of connecting joints for prefabricated components, which include preliminary and general design consideration.

##### Construction Quality Assessment System

On completion of the module, students should be equipped with knowledge and skills in quality management of construction projects to achieve a better Conquas score.

#### Electives (General)

As reflected on pages 279-281.

#### Life Skills Modules

As reflected on page 281.

## NITEC IN PRODUCT DESIGN

### COURSE SYNOPSIS

On completion of the course, students should be able to

- Source for information.
- Conduct design research.
- Conduct material research and selection.
- Prepare presentation materials.
- Produce conceptual sketches of products.
- Fabricate mock ups and models.
- Produce 2D and 3D CAD models.
- Fabricate prototype model.
- Prepare design presentation.
- Co-ordinate and validate production and design integrity.

### JOB OPPORTUNITIES

Nitec in Product Design graduates are employed by companies in the creative industries. Some of the job titles held by graduates include Assistant Product Designer, Product Illustrator and CAD Modeler. The strong foundation in creative skills, technical proficiency, social and environmental understanding and a keen insight into customers, supports a design professional with a wide choice of rewarding career options to look forward to.

### CERTIFICATION

Credits required for certification:

Core Modules	:	32
Specialisation Modules	:	12
Life Skills Modules	:	10
Elective Modules	:	4
<b>Total</b>	<b>:</b>	<b>58</b>

### COURSE STRUCTURE

Module Title	Credits
<b>CORE MODULE</b>	
Design Fundamentals	6
Design Conceptualisation	6
2D Illustration	5
3D Modeling	5
Design for Manufacturing	6
Industry Attachment	4
<b>SPECIALISATION MODULES</b>	
<b>Group A (Consumer Products)</b>	
Consumer Products Production Technology	6
Consumer Products Studio Design Practice	6
<b>OR</b>	
<b>Group B (Furniture)</b>	
Furniture Production Technology	6
Furniture Studio Design Practice	6
<b>ELECTIVES (COURSE SPECIFIC)</b>	
Packaging Design and Branding	2
<b>ELECTIVES (INTER-DISCIPLINARY)</b>	
Pottery Fundamentals	2
<b>ELECTIVES (GENERAL)</b>	
Refer to pages 279-281	
<b>LIFE SKILLS MODULES</b>	
Refer to page 281	

*Note: The offer of electives is subject to the training schedule of respective ITE Colleges. Students are advised to check with their Class Advisors on the availability of the elective modules they intend to pursue.*



## MODULE OBJECTIVES

### Core Modules

#### Design Fundamentals

On completion of the module, students should be able to apply the skills and knowledge of the different design stages; discover, define, develop and demonstrate to extract useful research data and gaining competency to rapidly express ideas through graphical means.

#### Design Conceptualisation

On completion of the module, students should be able to apply the skills and knowledge of design processes using various conceptualisation and visualisation techniques to creatively solve design problems through appropriate use of materials and media to convey their ideas in the field of product design.

#### 2D Illustration

On completion of the module, students should be able to perform 2D illustration of products with conformation to the design brief. Students will be able to render 2D vector drawing with appropriate colour gradation and effects; and enhance the product finishing with appropriate texture or material to produce a rendering to present their design concepts to intended audience clearly.

#### 3D Modeling

On completion of the module, students should be able to use 3D surface modeling software to produce computer models of complex, rounded forms; generate photo-realistic images of these forms using associated rendering/ray-tracing software and apply these tools in the product design process.

#### Design for Manufacturing

On completion of the module, students should be able to apply the skills and knowledge of the principles of designing for economic manufacture including the study and application of selected methods of production, tools, equipment, technologies and materials to a creative project. Economic evaluation and choices are made appropriate to the client's chosen direction. Concepts studied and applied include reverse engineering, re-design, material usage and sustainability.

#### Industry Attachment

Students will undergo a 3-month industry attachment or work on a design project from the industry. On completion of the module, students will gain work experience and develop capacity to adapt and handle challenging situations in the working environment. Students will apply the principles of product design, to conceptualise and execute a design project. Students should be able to develop concept specifications, determine finishing and materials to carry out the design and present their work confidently within the stated timelines.

### Specialisation Modules Group

#### A (Consumer Products)

##### Consumer Products Production Technology

On completion of the module, students should be able to apply the creative, technical and communication skills required to produce innovative objects, products, systems or experience. The project based activities will allow them to engage in the design and development process, promote creative problem solving, correct use of materials and applying appropriate production methods.

##### Consumer Products Studio Design Practice

On completion of the module, students should be able to conduct research, ideation, material exploration, presentation, and concept validation to strengthen knowledge to support pre- and post-manufacturing activities relevant to the consumer product design industry. The module develops student's ability and confidence towards professional practice and entrepreneurship in the consumer product design field.

OR

#### Group B (Furniture)

##### Furniture Production Technology

On completion of the module, students should be able to apply the creative, technical and communication skills required to produce innovative pieces and limited-production ranges of furniture products. The project based activities will allow them to engage in the design and development process, promote creative problem solving, correct use of materials and applying appropriate production methods.

### Furniture Studio Design Practice

On completion of the module, students should be able to conduct research, ideation, material exploration, presentation, and concept validation to strengthen their knowledge to support pre- and post-manufacturing activities relevant to the furniture design industry. The module develops students' ability and confidence towards professional practice and entrepreneurship in the furniture design field.

### Electives (Course Specific)

#### Packaging Design and Branding

On completion of the module, students should be able to use design principle to develop a branding trademark/logo and packaging design for their new product while working in cooperative group.

### Electives (Inter-disciplinary)

#### Pottery Fundamentals

On completion of the module, students should be able to utilize the basic tools, materials and techniques in pottery. Through this elective, students are able to explore the relationship between space and form by observing and manipulating materials, weight, texture and volume.

### Electives (General)

As reflected on pages 279-281.

### Life Skills Modules

As reflected on page 281.

## NITEC IN VIDEO PRODUCTION

### COURSE SYNOPSIS

On completion of the course, students should be able to

- Set up and operate camera equipment.
- Set up and operate lighting equipment.
- Assist with planning and execution of the various aspects of video production across the different departments.
- Perform video editing.
- Perform sound recording.

### JOB OPPORTUNITIES

Nitec in Video Production graduates are employed by companies as Camera Operator (Multi-cam, Single-cam), Videographer, Lighting Technician, Sound Recordist, Vision Mixer, Control Room Assistant, Studio Assistant, Production Assistant, Assistant Editor and Drone operator to Jib Operator.

### CERTIFICATION

Credits required for certification:

Core Modules	:	47
Life Skills Modules	:	10
Elective Modules	:	4
<b>Total</b>	<b>:</b>	<b>61</b>

### COURSE STRUCTURE

Module Title	Credits
<b>CORE MODULE</b>	
Fundamentals of Video Production	7
Video Post-Production	7
Production Techniques	6
Camera and Lighting Techniques	6
Studio Production	6
Location Field Production	6
Project	5
Industry Attachment	4
<b>ELECTIVES (COURSE SPECIFIC)</b>	
Understanding Storyboarding for Video Production	2
<b>ELECTIVES (INTER-DISCIPLINARY)</b>	
Lifestyle and Product Photography	2
Motion Graphics	2
<b>ELECTIVES (GENERAL)</b>	
Refer to pages 279-281	
<b>LIFE SKILLS MODULES</b>	
Refer to page 281	

*Note: The offer of electives is subject to the training schedule of respective ITE Colleges. Students are advised to check with their Class Advisors on the availability of the elective modules they intend to pursue.*

## MODULE OBJECTIVES

### Core Modules

#### Fundamentals of Video Production

On completion of the module, students should be able to interpret scripts for various types of video production and be able to perform basic pre-production. Students will also be able to perform fundamental camera operation, three-point lighting and sound recording for single-camera productions.

#### Video Post-Production

On completion of the module, students should be able to import files, manage media files and perform non-linear video editing according to script. Students will also be able to perform basic colour balancing for the video images and perform audio levelling and equalisation for the final mix-down.

#### Production Techniques

On completion of the module, students will be able to use appropriate video production accessories and supporting equipment for single-camera video production. They will be able to monitor and record audio with an audio mixer. They will also be able to manage basic production budget and carry out casting audition and location management.

#### Camera and Lighting Techniques

On completion of this module, students should be able to utilise various video camera systems. They should be able to handle sophisticated video equipment, camera accessories and to apply advanced lighting techniques for various types of video production.

#### Studio Production

On completion of this module, students should be able to plan, set up, operate and produce a video within a television broadcast studio and multi-camera production environment. Students should be able to execute these tasks as part of a team in a portable and mobile setup.

#### Location Field Production

On completion of this module, student should be able to assess the location/scenario and determine the appropriate production techniques to be used. They should also be able to recommend appropriate equipment to carry out small team location productions and multi-cam event productions.

#### Project

On completion of the module, students should be able to produce a basic script, storyboard, budget and carry out the production by taking on active roles as Producer, Camera Operator, Lighting Crew, Sound Man and Video Editor. Projects can range from Corporate, Marketing, Infotainment, Social Media to Events. The project module will cover all aspects of the video production processes.

#### Industry Attachment

Students will undergo a three-month industry attachment and apply video production techniques suitable for corporate videos, event videos or entertainment programmes.

#### Electives (Course Specific)

##### Understanding Storyboarding for Video Production

On completion of the module, students should be able to create an effective storyboard from rough sketches to finished product for presentation.

#### Electives (Inter-disciplinary)

##### Lifestyle and Product Photography

On completion of the module, students should be able to think, analyse, conceptualise and execute a lifestyle product photo shoot.

#### Motion Graphics

On completion of the module, students should be able to apply their graphics practice to the dimension of time, animation, key framing and movement.

#### Electives (General)

As reflected on pages 279-281.

#### Life Skills Modules

As reflected on page 281.

## NITEC IN VISUAL COMMUNICATION

### COURSE SYNOPSIS

On completion of the course, students should be able to

- Produce drawings.
- Produce design artworks.
- Perform digital imaging.
- Create illustrative images.
- Perform digital photography.
- Develop final artwork for output.
- Design pictograms.
- Create layout and composition.
- Perform press checks.
- Develop packaging.
- Make client presentations.

### JOB OPPORTUNITIES

Nitec in Visual Communication graduates are employed as Graphic Artist, Graphic Designer, Digital Artist, Illustrator and Assistant Photographer for companies in advertising, corporate branding, graphic design, photography and multimedia solutions. There are excellent opportunities for career development and advancements to supervisory positions and beyond.

### CERTIFICATION

Credits required for certification:

Core Modules	:	46
Life Skills Modules	:	10
Elective Modules	:	6
<b>Total</b>	<b>:</b>	<b>62</b>

### COURSE STRUCTURE

Module Title	Credits
<b>CORE MODULE</b>	
Drawing Fundamentals	6
Design Principles	6
Applied Photography	6
Digital Imaging	6
Graphics and Typography	6
Prepress Technology	6
Packaging Design	6
Industry Attachment	4
<b>ELECTIVES (COURSE SPECIFIC)</b>	
Pottery Fundamentals	2
Printmaking Fundamentals	2
Digital Illustration	2
Lifestyle and Product Photography	2
<b>ELECTIVES (GENERAL)</b>	
Refer to pages 279-281	
<b>LIFE SKILLS MODULES</b>	
Refer to page 281	

*Note: The offer of electives is subject to the training schedule of respective ITE Colleges. Students are advised to check with their Class Advisors on the availability of the elective modules they intend to pursue.*

## MODULE OBJECTIVES

### Core Modules

#### Drawing Fundamentals

On completion of the module, students should be able to apply the fundamental drawing techniques to express their perception of forms using various mediums.

#### Design Principles

On completion of the module, students should be able to interpret design briefs and apply design elements like form, shapes, lines, colour, and type into compositions that creatively meet client's requirements.

#### Applied Photography

On completion of the module, students should be able to determine proper camera settings, capture shots, utilize various photographic equipment and export images in the appropriate format and resolution using basic digital manipulation techniques.

#### Digital Imaging

On completion of the module, students should be able to create graphics and illustrations using digital imaging software. Students will also be able to digitally manipulate and retouch images according to the specific styles and genres required.

#### Graphics and Typography

On completion of the module, students should be able to create pictograms and apply effective typography onto design layouts and compositions using software programs.

#### Prepress Technology

On completion of the module, students should be able to perform press check and develop artworks for final output in desktop publishing.

#### Packaging Design

On completion of the module, students should be able to design and develop innovative packaging using various forms and materials while demonstrating knowledge of effective packaging concepts and techniques.

#### Industry Attachment

Students will undergo a 3-month attachment in the graphic design or print production industry, or work on an industry-based project. On completion of the module, students will gain experience and insights into the working environment. Students will apply the principles and techniques of visual communication and assist in producing communication collaterals in various formats. Students should be able to perform research for design references, identify resources and present their work confidently within the stated timelines.

#### Electives (Course Specific)

##### Pottery Fundamentals

On completion of the module, students should be able to create and produce pottery works using a variety of techniques.

##### Printmaking Fundamentals

On completion of the module, students should be able to understand the outcome and possibilities of using duplication as an art medium and to explore their creativity using texture.

##### Digital Illustration

On completion of the module, students should be able to illustrate and paint using imaging editing softwares.

##### Lifestyle and Product Photography

On completion of the module, students should be able to analyse, conceptualise and execute a lifestyle product photo shoot.

#### Electives (General)

As reflected on pages 279-281.

#### Life Skills Modules

As reflected on page 281.