COURSE DESCRIPTIONS 科目簡介

COURSES FOR 4-YEAR UNDERGRADUATE PROGRAMMES

ADA1001   2D Animation (3 credits)
This course is an introduction to the various elements of 2D traditional and digital animation. Through individual and group assignments, students will explore various tools and techniques while developing their skills of styles, concepts and have better understanding of the possibilities of animation. This course will also experiment with the use of interactive text, vector and bitmap graphics, photography, sound and video as it relates to 2D animation.

ADA1002   Art History: An Introduction (3 credits)
The course provides a historical survey of artists, artistic styles and artistic movements from Ancient times to the present day. Relatively more time will be devoted to the fine arts (for example, painting, printmaking, and sculpture) and to the development of art after the Middle Ages. Although the course focuses on Western art, the instructor is free to intersperse the survey with chapters on Chinese and Asian art.

ADA1003   Computer Graphics (3 credits)
This course is designed to introduce the production of computer graphics as they apply to arts and design from studio perspective. Both technical and aesthetic issues will be addressed. Aesthetic issues will encompass concepts, composition, appreciation and historical context. Technical topics will include raster and vector imaging, scanning, retouching, printing, animated graphics, and other related topics. The Adobe CC software package will be used to illustrate the principles and techniques, and to produce the projects.

ADA1004   Introduction to Moving Images (3 credits)
This course introduces studies of moving images as an interdisciplinary subject grounded in film history, updated by computer technology in the 21st century. The course will first focus on a brief history of moving images, covering its phases from pre-photographic optical effects to the institutionalised form of cinema. The second part will cover key elements and tools needed to grasp film as a creative and communicative medium. Students must consider (and assess) ways in which cinema makes sense to audiences, practitioners and theorists. The last part of this course engages students with a broad-based sense of contemporary moving images via intersections between film art and digital technologies. Students will learn the fundamental theories of media technology empowered for creative and artistic ends.

ADA2001   History of Animation (3 credits)
This course introduces students to the history of animation, and to the ways animation forms and styles have developed over time. The course covers animation from its prehistory, before the invention of film, to the present day, including both traditional hand-drawn animation and digital animation.

ADA2002 3D Animation Workshop (3 credits) (recoded from ADA3001 from 2019-20)
(Prerequisite: ADA2003 Digital Modeling and Rendering)
This course will present the fundamental concepts, issues and techniques of three-dimensional computer animation. Students are required to not only be able to navigate the software interface to create animated sequence, but also to create expressive motion. In the course, students will observe and analyse motion and explore different animation techniques in order to create believable, expressive motion. Animation, because of its time consuming nature, requires planning and organisation. The course will explore the world of 3D

computer animation from initial concept to final production. It introduces the language, principles, aesthetics and 3D tools used in the creation of animation within the context of art and design. The Autodesk Maya software package will be used to illustrate the principles and techniques dealt with.

ADA2003   Digital Modeling and Rendering (3 credits)
This course will present the fundamental concepts, issues and techniques of three-dimensional computer modeling and rendering. Both technical and aesthetic issues will be addressed throughout the course. Aesthetic issues will encompass concept, composition, light and color, framing and historical context. Technical topics will include: coordinate systems, transformations, primitives, patches, polygons, NURBS surfaces, hierarchical grouping, lighting, rendering, and texture mapping. The Autodesk Maya software package will be used to illustrate the principles and techniques, and to produce the projects.

ADA2004   Motion Graphics (3 credits)
This course will explore the design requirements for professional quality broadcast graphics and title design for animation and multimedia projects. Using combinations of still images, graphics, video footages and audio sound tracks, we will examine the relationships of motion, pacing, textures, transitions, design and composition in space and time. Emphasis will be placed on compositing techniques, design concepts, art direction, aesthetics and the overall style of professional motion graphics productions. Asset management, aspect ratios, resolutions, interpolation algorithms, colour depth and image stabilisation techniques are also addressed. The Adobe CC software package will be used to illustrate the principles and techniques, and to produce the projects.

ADA2005   New Media Storytelling (3 credits)
Storytelling is an essential part of new media cultural production. This course introduces to students characteristics and techniques of new media storytelling, helps students to gain hands-on experience in producing multimedia artifacts, and investigates social and ethical issues involved in new media storytelling.

ADA2006   Storytelling and Storyboarding (3 credits)
Storytelling and Storyboarding is an essential part of new media production. This course introduces to students characteristics and techniques of creative storytelling, helps students to gain hands-on experience in producing multimedia artifacts, and develop different formats of storyboards that will best serve the intended media. Students will learn to translate concepts such as shot types, continuity, pacing, transitions and sequencing into a visual narrative. Exploration of cinematic vocabulary and storyboard technique in the creation of both personal and professional expression are emphasised.

ADA2007 Experimental Animation (3 credits)
This course approaches animation from an artistic, individualized point of view. It offers an opportunity for students to experiment with different styles and techniques of animation while addressing fundamental problems such as rhythm, timing, and sound. Emphasis is on conceptual idea and development, abstract and material processes, and encourage students to discover and explore methods of visual expression in animation. Through individual and group assignments, students will explore various tools and techniques while developing their skills of styles, concepts and have better understanding of the possibilities of animation. The course is organized to maximize hands-on experience and will include screening, in-class critiques, exercises, and work sessions. The critiques will be run as seminar-style discussions, while all students could participate in the critiques and discussions of each student's work.

ADA3001 3D Character Animation Workshop (3 credits) (recoded from ADA2002 from 2019-20)

This course deals with advanced issues of 3-D computer animation. The subject will stress professional techniques and workflow methodology to maximise students' realisation of their ideas and concepts. Students will develop highly accurate timing, to achieve their individual style of animation. The subject should improve students' insight into what makes an animation succeed, whether it is computer generated or not. It should also improve students' abilities to themselves produce successful 3-D computer animation. The Autodesk Maya, Adobe CC software packages and Advanced Skeleton Plugin will be used as an example and to produce the project.

In the workshop, students are expected to conduct themselves as professionals. Moreover, they are expected to be considerate and helpful peers to their classmates, to share knowledge, to be attentive and to provide thoughtful commentary during critiques, to participate heart and soul, to present work in progress professionally, and to turn in the project on time and in a professional manner.

ADA3002 Concepts of Expanded Reality (3 credits)

This course offers an introduction to some of the main theoretical issues occasioned by the technologies of virtual and augmented reality. Issues to be addressed include: What is virtual reality? How does one engage with such a reality? What technologies are used in 'building' a virtual or augmented reality? And what are the ethical questions that such 'worlds' pose?

ADA3003 Cultural and Creative Industries: Principles and Practices (3 credits) (deleted from 2023-24)

Development of cultural and creative industries is key to the growth of the contemporary knowledge-based economy. This course introduces the principles of the cultural and creative industries and covers the work of creative industries practitioners who explore the expression of culture and creativity for artistic gains.

ADA3004 Interactive Art (3 credits)

This course introduces students to the concept, history, and techniques of interactivity in art and design, with an emphasis on interactive designs in computer animations. The course will explore the participatory and performative nature of interactive art and designs from various perspectives, including media studies and human-computer interaction studies.

ADA3005 Photography Theory (3 credits)

This course offers an introduction to some of the main theoretical issues that photography occasions. The medium of photography will be addressed from philosophical, technological, and art-historical perspectives. A special attention will be given to the analogue-digital transformation of photography, and the implications that this might have with respect to the epistemology of photography (how photographs provide knowledge), and photography's artistic capacities.

ADA3006 Sound Design (3 credits)

Animation means 'giving life to,' which is augmented by sound design and its integration with images. This course will enlighten students to discover the power acoustics have on human experience and creative process. Students will learn how to imagine, create and notate soundscapes.

ADA3007   Non-fiction Video (3 credits) (deleted from 2023-24)
Non-fiction video encompasses a wide range of genres and serves many different purposes. It is not limited to the forms of documentary we see on TV. This type of video-making raises important questions having to do with the nature of images, their intended impact on society, perception, cognition, truth, and story-telling techniques. It is especially important during the digital era nowadays, the usage of digital imaging has penetrated our ordinary life and an enormous number of non-fiction visual materials were produced daily. Drawing on cinematic examples from diverse national contexts, especially videos from East Asia, this course foregrounds the formal complexities of contemporary non-fiction video in order to explore their theoretical as well as ethical, social, and political implications. Particular emphasis will be paid to new media and the online content that these media facilitate.

ADA4001   Capstone Project (6 credits)
The Capstone Project requires the planning and execution of an animation or digital arts project; for example, a short animation film, a simple video game, or an installation that makes use of new media (for example, video). The precise nature of the project will be determined by the student in consultation with his or her supervisor(s).

ADA4002   Digital Art Installation (3 credits)
This course is an introduction to the history, concepts, and issues of installation of digital art. It will explore the uses of digital art in a variety of contexts, including theatres, musical, exhibition spaces such as museums, trade fairs, and various types of entertainment centres. Students will explore various modes of human-machinery interaction, including input-systems (e.g. sensors, motion capture, etc), output-systems (projection, sounds, etc), and hybrid reality where live actions of humans are mixed with digital elements.

ADA4003   Game Design (3 credits)
This course is designed to teach students the process of computer game design. It will focus on the practical aspects of game design, but will also introduce students to the history of games, especially board and card games, and the theoretical basis for gameplay in general. Students will learn to develop game ideas, create design documents, create basic computer games using popular design tools, collect player feedback, and revise their game designs.

ADA4004   Production Design (3 credits)
Production design translates written words for the screen, creating visual effects for narratives. This course introduces to students basic elements of production design and train students on how to use appropriate techniques to design.

ADA4005   Virtual Reality (VR) / Augmented Reality (AR) Workshop (3 credits)
This course offers a production-based introduction to the principles of virtual and augmented reality. The course is a combination of lectures and lab-based exercises, where the fundamentals of VR /AR technology is described and practiced. During the course, students will, as a project, design a basic Virtual Reality application.

ADA4006   Visual Effects Workshop (3 credits)
This course focuses on the overall workflow of digital visual effects productions, explores different visual effects and dynamics systems, and introduces the basic principles behind each process among the spectrum of digital visual effects that are being practiced in the current animation and digital arts industry. Hands-on experience is provided in the workshops in order to assist students in expanding their visual vocabularies. An industrial standard 3D software package will be used to illustrate the principles and techniques dealt with.