

Art & Technology

Major

(1) Electives: Students are required to complete 22 cr. (4 required core courses: 10 cr./ 4 elective core courses: 12 cr.) of elective courses. As for the required core course, one among the section ① (during 3rd semester) and three from ②,③ and ④ sections (one from each section during 4th semester) must be completed. Among the section ⑤, a total of 12 cr., including STS2004 and STS2008, must be completed.

(2) Overview of Art and Technology Major

		Major Concentration		Multiple Major	
		IA Track	ET Track	IA Track	ET Track
Total cr.		Min. 57 cr.	Min. 57 cr.	Min. 48 cr.	Min. 48 cr.
Required Major		13 courses (33 cr.)		12 courses (30 cr.)	
Elective Major	IA Track	6 courses	2 courses	4 courses	2 courses
	ET Track	2 courses	6 courses	2 courses	4 courses

		Major Concentration		Multiple Major	
		Interactive Art (IA)	Entertainment Technology (ET)	Interactive Art (IA)	Entertainment Technology (ET)
Required Major		Total 33 cr. ANT2001 ANT2003 ANT2004 ANT2005 ANT3002 ANT3006/ANT3007 (Choose one) ANT4001 ANT4003/ANT4004 (Choose one) ANT4005, ANT4002, ANT4006, ANT4010 (1 cr. for each) ANT4013		Total 30 cr. ANT2001 ANT2003 ANT2004 ANT2005 ANT3002 ANT3006/ANT3007 (Choose one) ANT4001 ANT4003/ANT4004 (Choose one) ANT4002, ANT4006, ANT4010 (1 cr. for each) ANT4013	
Major Electives		Min. 24 cr.: 6 courses/18 cr. from IA Track 2 courses/6 cr. from ET Track	Min. 24 cr.: 2 courses/6 cr. from IA Track 6 courses/18 cr. from ET Track	Min. 18 cr.: 4 courses/12 cr. from IA Track 2 courses/6 cr. from ET Track	Min. 18 cr.: 2 courses/6 cr. from IA Track 4 courses/12 cr. from ET Track
Total		Min. 57 cr.		Min. 48 cr.	

***English Lecture Roadmap**

Semester	Courses (to be provided in English, 11 in total)
Spring 2012	Cultural Contents Planning and Development
Fall 2012	Cultural Management and Marketing
Spring 2013	Creative Performance Project, Basic Computer Graphics, Web Programming, Cultural Consumption Theory
Fall 2013	Superhero and American culture, Creative Visual Story Project, Digital Media Art Workshop, Game Programming
Spring 2014	Realistic Contents Project, Physical Computing, Mobile Programming
Fall 2014	Sensing for Interaction and Interface, Video Treatment and Virtual/Augment Reality
Spring 2015	Smart Device Development
Professor	Kim Joo Seop et al.

- (3) Art & Technology Concentration Major (Min. 57 major course cr.).
 AT concentration major consists of Interactive Art (IA) track and Entertainment Technology (ET) track, and students of this major are required to choose either of the two tracks in their 4th semester.

Required Major Courses (Min. 33 cr.)

Basic Major Courses	Advanced Major Courses
ANT2003 ANT3002 ANT3006/ANT3007 (Choose one) ANT4003/ANT4004 (Choose one)	ANT2001 ANT2004 ANT2005 ANT4001 ANT4005 ANT4002 ANT4006 ANT4010 ANT4013

Elective Major Courses (Min. 24 cr. for both IA and ET Tracks)

Interactive Art (IA) Track	Entertainment Technology (ET) Track
ANT2002 ANT4007 ANT3001 ANT3004 ANT3008 ANT3010 ANT3004 ANT4015	ANT3003 ANT4008 ANT4011 ANT3009 ANT4009 ANT4012 ANT4014 ANT4015

- Internship is available for only summer and winter sessions, and applicable to only AT concentration major students.
- ANT 4002, 4006 and 4010 are one-cr. courses, and students must complete the three courses before taking ANT 4013 in their last semester (or 8th semester). Those who wish to graduate early must complete the three courses so that they can take ANT4013 in their 7th semester.
- The minimum English score for graduation certification is the same level as the requirement of Humanities and Social Studies (TOEIC 800/TOEFL

96(iBT), 240 (CBT)).

(4) Multiple Major (Min. 48 major cr. in total)

Just as concentration major, multiple major students are required to choose either IA or ET track. Double majoring is a requirement for multiple major students, and recommended for concentration major students.

Required Major Courses (Min. 30 cr.)

Basic Required Major Courses	Advanced Required Major Courses
ANT2003 ANT3002 ANT3006/ANT3007 (Choose one) ANT4003/ANT4004 (Choose one)	ANT2001 ANT2004 ANT2005 ANT4001 ANT4002 ANT4006 ANT4010 ANT4013

Elective Major Courses (Min. 18 cr. for both IA and ET Tracks)

Interactive Art (IA) Track	Entertainment Technology (ET) Track
ANT2002 ANT4007 ANT3001 ANT3004 ANT3008 ANT3010 ANT3004 ANT4015	ANT3003 ANT4008 ANT4011 ANT3009 ANT4009 ANT4012 ANT4014 ANT4015

- ANT4005 is an elective major course for multiple major students.

< Course-Taking Schedule >

Semester	General Major	Required Major	Elective Major	Core/Electives
1 st		ANT2001	ANT2002	Reading and Writing(2)/English I(3)/ C Language (3)/ College Math (3)
2 nd	ANT2003	ANT2004	ANT3001	Writing for Each Major (3)/ English II (3)
3 rd	ANT3002	ANT2005	ANT3005 ANT3003 ANT3004	Core Required/Elective (1 course 3 cr.)
4 th	ANT3006 ANT3007 (Choose one)	ANT4001 ANT4002 (Choose one)	ANT3008 ANT3009 ANT3010	Core Required/Elective (1 course 3 cr.)
5 th	ANT4003 ANT4004 (Choose one)	ANT4005 ANT4006	ANT4007 ANT4003 ANT4009	
6 th		ANT4010	ANT4011 ANT4012	
7 th		ANT4013	ANT4014	
8 th		ANT4013		

Basic Required Major Courses

ANT2003 Humanities and Creativity 3 cr.

(Lect.: 3hr)

This course is designed to help students understand concepts, characteristics, trends and development, and cultural-historic meanings of representative works of humanities, such as eastern and western literature, poetry, novels, religions and philosophy.

ANT3002 Storytelling Design 3 cr.

(Lect.: 3hr)

The importance of storytelling is growing in virtually every realm, including products, contents, design and marketing. This course is designed to help students understand basic components and structures required to transform a narrative into a story, and story-creating techniques required to create contents, like digital movies, animations, games and e-learning contents, and experience field works by carrying out storytelling projects.

ANT3006 Korean Studies and Korean Literature 3 cr.

(Lect.: 3hr)

This course is designed to help students understand Korea in many different aspects, like its history, nation, people and culture. In particular, students will examine the relations between Korea's national culture and cultural archetypical contents so that they can develop and tap into cultural contents unique to Korea.

ANT3007 Superhero and American Culture 3 cr.

(Lect.: 3hr)

This course is designed to help students understand characteristics of superheroes in movies and animations, and analyze the Greek philosophy and Christian philosophy that base the American superhero culture, so that they can develop logical thinking abilities.

ANT4003 Mythology and Epics 3 cr.

(Lect.: 3hr)

This course is designed to help students understand the factors affecting fun and absorption of digital contents, by comprehensively diagnosing and analyzing narrative factors, structures and composing principles of both eastern and western mythologies that are reflected in digital contents, like movies, games, animations, web cartoons and novels.

ANT4004 Interactive Storytelling 3 cr.

(Lect.: 3hr)

This course is designed to help students learn how to re-organize and deliver humanities-based stories in the digital environment, and how to create scenarios in order to expand user experiences into multiple channels, like online games, hypertexts, web arts and interactive fictions.

Advanced Required Major Courses

ANT2001 Creative Art Introduction 3 cr.

(Lect.: 3hr)

This course aims at developing students' artistic creativity, multi-dimensional thinking and co-work ability that are required by the knowledge economy and convergence industries of the future. Through field works, workshops, interviews, presentations and discussions, this course helps students understand and experience diverse art fields, and develop creative ideas and self-leading learning abilities

ANT2004 Art and Design 3 cr.

(Lect.: 3hr)

This course aims at helping students learn basic art knowledge and visual expression techniques by practicing in a studio cubic designs and design senses required to express creative contents.

ANT2005 Basic Computer Graphics 3 cr.

(Lect.: 3hr)

This course aims at developing students' ability to utilize applied computer-design and graphic techniques so that they can

express creative ideas by computer. To this end, students learn theories about 2D and 3D geometric transformation, projection of a 3D object on a 2D plane, clipping, curve expressions, mapping, basic 3D rendering, animation and modeling, and practice the rendering techniques.

ANT4001 Creative Visual Story Project 3 cr.

(Lect.: 3hr)

This course aims at developing students' ability to reorganize and reenact existing stories or actual events based on their knowledge about humanities and creative imagination, or to create artistic and creative contents. To this end, students will carry out a project in which each student plays a role of a scenario writer, a programmer, an engineer, a sound designer or an animator, and collaborates with other students to complete a creative art work, such as a video content, a mobile application, an education content or a game.

ANT4005 Realistic Content Project 3 cr.

(Lect.: 3hr)

In this course, students conduct a group project to develop interactive media, like games, exhibitions and mobile contents, by utilizing various human interface technologies, such as augment reality, mixed interface, tangible space, tangible interface, tangible agent and responsive cyber space. This course aims at polishing students' ability to develop new products, like high value-added contents and new smart devices, or new business models, by converging their creative imagination and artistic nature, and user interface technologies.

ANT4002 Graduation Work Project (I) 1 cr.

In this course, students independently carry out a comprehensive creative design project with the help of advisors' guidance. Students prepare a first draft of project plan that covers the entire process of the project from content or product

planning to design, development, financing and marketing in order to create contents or products that emotionally appeal consumers and improve value of life.

ANT4006 Graduation Work Project (II) 1 cr.

In this course, students independently carry out a comprehensive creative design project with the help of advisors' guidance. Students modify and supplement their first draft of project plan.

ANT4010 Graduation Work Project (III) 1 cr.

In this course, students execute the project plan completed in the ANT4006 course.

ANT4013 Graduation Work Project (IV) 3 cr.

This course aims at creating a complete version of graduation work, based on the plan and ongoing work of the previous courses (ANT 4002, 4006 and 4010). The final works will be showcased at official exhibitions.

Elective Major Courses (IA Track)

ANT2002 Cultural Contents Planning and Development 3 cr.

(Lect.: 3hr)

In this course, students learn about studies and utilizations of cultural archetypes, like stories, images and cultural heritage, through contents analyses, and carry out a group project so that they can develop abilities to draft contents planning, design contents prototypes and execute the plans.

ANT3001 Cultural Management and Marketing 3 cr.

(Lect.: 3hr)

In this course, students learn basic knowledge about management and marketing to commercialize various cultural and artistic works, contents, and IT-convergence ideas. In addition, they conduct a collaborative group project that covers

art/technology-based contents planning, business model development and proposal preparation so that they can practice project planning, development and execution.

ANT3004 Cultural Consumption Theory 3 cr.

(Lect.: 3hr)

In this course, students examine basic theories of psychology, consumer psychology toward experiential goods like cultural art and cultural contents, factors that affect consumption decision making, and correlations between expectations, desire drivers and satisfaction so that they can advance understanding of consumption psychology and behavior.

ANT3005 Creative Performance Project 3 cr.

(Lect.: 3hr)

Based on the knowledge acquired in the creative art introduction course, this course aims at developing students' ability to plan and produce a Digilog-type creative performance, by converging analog art and digital technologies. Experts in each field will provide special lectures and mentoring for students to conduct a group project of making a creative performance. In the course of conducting the project, students will participate in group discussions, host rehearsals and interim presentations, and manage collective review sessions. This course is mainly based on group projects to maximize students' collaboration, and aims at developing students' creativity by physical experiences and senses.

ANT3008 Digital Media Art Workshop 3 cr.

(Lect.: 3hr)

In this course, students nurture their ability to realize creative contents by utilizing Photoshop program. They also learn techniques of interactive media control and create simple digital media works so that they can pursue possibilities of producing interactive media works that respond to users' action in the

MAX/MSP/Jitter programming environment.

ANT3010 Animation Mechanism and Production 3 cr.

(Lect.: 3hr)

In this course, students practice 3D modeling and rendering techniques by utilizing animation software. They also practice planning and making 3D animations by utilizing the software.

ANT4007 Video Planning and Producing Workshop 3 cr.

This course provides workshops on the entire process of video art creation, from contents planning to pre-production, production and post-production. Students carry out a group project to create a simple video work, and the evaluation is based on peer review.

Elective Major Courses (ET Track)

ANT3003 Web Programming 3 cr.

(Lect.: 3hr)

In this course, students learn internet technologies, including TCP/IP, WWW, HTML/HTTP, Web server, SNS service, JAVA/JAVA Script programming, XML/XHTML, and practice applications of the technologies.

ANT4008 Physical Computing 3 cr.

(Lect.: 3hr)

In this course, students learn about mechanical and electronic appliances that are necessary to design and realize installation arts, lighting art works and art robots. To this end, students design appliances by utilizing LED, sensors, motors and electronic parts, and practice circuit composition.

ANT4011 Sensing for Interaction and Interface 3 cr.

(Lect.: 3hr)

Knowledge about sensing and interface design is required to design and realize interactive art works. This course deals with sensing, and interface design and realization that are necessary for human

interactions with computers or virtual spaces.

ANT3009 Game Programming 3 cr.

(Lect.: 3hr)

In this course, students learn theories and practices of computer graphics, 3D modeling and rendering, computer algorithm and artificial intelligence, and develop a simple game program as a final assignment.

ANT4009 Mobile Programming 3 cr.

(Lect.: 3hr)

In this course, students learn web programming techniques to create mobile contents for smart phones, tablets and other mobile devices that have significant impact on the society from personal lives to industries. To this end, this course helps students understand the characteristics of the wireless internet environment, mobile technologies and mobile services, and polish mobile programming abilities by utilizing mobile middleware and wireless networking technologies. Students also develop actual programs or mobile applications based on their understanding of wireless internet platforms, development tools and applications.

ANT4012 Video Treatment and Virtual/Augment Reality 3 cr.

(Lect.: 3hr)

In this course, students learn how to obtain, analyze and treat actually-taken videos, augment reality technology to synthesize actually-taken videos and graphics, and virtual reality technology to interactively present 3D information to users. To this end, students learn about basic signal treatment, 3D space information analyses and interface apparatus, and utilize their knowledge about computer graphics.

ANT4014 Smart Device Development 3 cr.

(Lect.: 3hr)

In this course, students compare and analyze different features and technologies of smart devices, and design components, like UX and UI, and create a prototype of a future device as a final assignment.

Summer/Winter Sessions Only

ANT4015 Internship 3 cr.

Students experience actual management practices, business or policies regarding cultural contents and media, solutions and devices in companies and private or public organizations in the cultural art and cultural contents, media or media engineering sectors.