The Art and Design program (https://www.mtmercy.edu/art) offers courses that provide students with the technical and aesthetic instruction necessary for visual expression of all types. An environment conducive to the student's total involvement as a developing artist is provided with offerings in art history and appreciation, and studio work in fine arts plus the possibility of taking graphic design courses. An Art major prepares students for careers involving the visual arts or further study in graduate or professional schools.

The program maintains studios (https://www.mtmercy.edu/art-facilities) for sculpture, ceramics, drawing, painting, textiles and printmaking. Photographic darkrooms, and a Macintosh computer lab (https://www.mtmercy.edu/art-facilities), with 17 networked machines, support the program. The Janalyn Hanson White Art Gallery (https://www.mtmercy.edu/gallery) schedules professional exhibitions and visiting artists throughout the year.

Transfer students in Art may be asked to submit a portfolio of work to the chairperson to identify students' best placement in Art and Design classes.

Students in any of the Art and Design majors build the appropriate and necessary skills to: verbally articulate analysis of artworks; think visually and creatively; and present their art and design work in a professional manner.

Career Opportunities

Professional artist; basis for graduate work in visual arts; preparation for work in museums and educational agencies, media, publications and various businesses; government or public agencies requiring people with cultural knowledge. Optional internships prepare students for employment.

Sophomore/Transfer Student Portfolio Review

By the end of the sophomore year or the end of a transfer student's first year at Mount Mercy, Art majors are required to have a portfolio review to check progress and be advised on continuing in the Art & Design Program. The portfolio will be the major consideration, but the grade point average in art courses and the grade point average in all courses also will be reviewed. By the end of the sophomore year all Art-related majors should have taken the foundational art curriculum courses: AR 102 Drawing I, AR 103 Art & Graphic Design Fundamentals, AR 105 Introduction to the Studio, and at least one other studio or graphic design courses. This will give students an opportunity to assemble a varied portfolio for review.

Student ePortfolio

Art and Design students maintain an ePortfolio for each year of their progress toward a degree. The ePortfolio provides evidence that students are meeting the Program's goals and objectives. (https://www.mtmercy.edu/outcomes-and-assessments-0) The ePortfolio is available through the Brightspace Learning Management System.

Admission to the Internship

Internships for Art majors are not required but if a student is interested in pursuing one, she/he should apply for it in the winter preceding the desired internship period. Students should meet the requirements for the internship before making application. Application forms are available from the Art and Design faculty, who make the admission to the internship decision. Acceptance into the internship is based on the following:

1. The minimal admission prerequisite requires completion of the foundational Art & Design courses: AR 102 Drawing I, AR 103 Art & Graphic Design Fundamentals, AR 105 Introduction to the Studio, and at least two other beginning-level studio or graphic design courses with grades of no less than C (2.00) with a cumulative grade point average of no less than 2.00.
2. An internship in Arts Management requires that in addition to the minimal admission prerequisites AR 202 Drawing II, AR 212 Art History I, and AR 213 Art History II be completed or taken concurrently with the internship with grades of no less than C (2.00) with a cumulative grade point average of no less than 2.00.
3. A brief summary stating why the student wishes to participate in the internship.
4. Possession of personal qualities considered necessary for a successful art professional including personal and professional integrity; a demonstrated ability to organize work and to work under the pressure of deadlines; craftsmanship in producing artwork; creativity; assertiveness; clarity in speaking, writing, and accurate spelling; and a willingness to cooperate with others and to accept the benefit from criticism.
5. Presentation of a professional quality portfolio that includes art work relative to the internship is desired.

Decisions of Art and Design faculty shall be transmitted to the applicants and to other appropriate persons at Mount Mercy promptly and in writing.

Students whose applications are refused may discuss the matter with the Art and Design Program Coordinator. Further recourse may be had by contacting the Chair of the Department of Communication, Literature and the Arts.

Major in Art

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR 102</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>AR 103</td>
<td>Art &amp; Graphic Design Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>AR 105</td>
<td>Introduction to the Studio</td>
<td>3</td>
</tr>
<tr>
<td>AR 141</td>
<td>Painting I</td>
<td>3</td>
</tr>
<tr>
<td>AR 151</td>
<td>Printmaking I</td>
<td>3</td>
</tr>
<tr>
<td>AR 161</td>
<td>Ceramics I</td>
<td>3</td>
</tr>
<tr>
<td>AR 171</td>
<td>Sculpture I</td>
<td>3</td>
</tr>
<tr>
<td>AR 109</td>
<td>Art Environments</td>
<td>3</td>
</tr>
<tr>
<td>AR 202</td>
<td>Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>AR 212</td>
<td>Art History I</td>
<td>3</td>
</tr>
<tr>
<td>AR 213</td>
<td>Art History II</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>AR 216</td>
<td>History Of Non-Western Art</td>
<td>3</td>
</tr>
<tr>
<td>AR 315</td>
<td>Contemporary Art and Theory</td>
<td>3</td>
</tr>
<tr>
<td>AR 295</td>
<td>Survey Of Mexican Culture Today (We allow this course to double count in the core Global Awareness domain)</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>AR 106</td>
<td>Photography I</td>
<td>3</td>
</tr>
<tr>
<td>AR 120</td>
<td>Visual Technology</td>
<td>3</td>
</tr>
<tr>
<td>AR 280</td>
<td>Video on the Computer</td>
<td>3</td>
</tr>
<tr>
<td>AR 410</td>
<td>Senior Thesis Preparation</td>
<td>1</td>
</tr>
<tr>
<td>AR 415</td>
<td>Senior Thesis &amp; Exhibit</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>43</strong></td>
</tr>
</tbody>
</table>
All Art and Design majors should elect AR 101 Introduction To Art for their core curriculum fine arts requirement. Art students are required to select an area of emphasis in two- or three-dimensional studio art. This is done by electing to take three additional courses in either 2-D or 3-D classes. These should be upper-level courses. For example, a student with a 2-D emphasis might elect to take AR 251 Printmaking II, AR 206 Photography II, and Independent Study in Drawing. Other recommended courses for Art are BK 208 Principles Of Marketing; BK 305 Professional Selling; or additional History and Art History courses for students interested in museum work and graduate school.

**Academic Requirements**

All Art majors must earn a grade of C- and above in all required courses for the major, including two- and three-dimensional emphasis areas.

Students cannot double major between Art and Art-Education.

**Art and Design Minor**

With the number of course choices available in the Art & Design Minor, it is possible for a student to specialize in either Fine Arts or Graphic Design.

<table>
<thead>
<tr>
<th>Art 101 Introduction To Art: 3 semester hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>A general survey of art from a historical and aesthetic frame of reference. The course will include lecture/discussion and studio projects designed to increase understanding and appreciation for the value of art regardless of the cultures, time period, or individuals from which it may have come. One required field trip. This course satisfies the Expressive Arts - Fine Art Core Curriculum Domain. ($15 lab fee).</td>
</tr>
</tbody>
</table>

**Courses**

**AR 101 Introduction To Art: 3 semester hours**

A general survey of art from a historical and aesthetic frame of reference. The course will include lecture/discussion and studio projects designed to increase understanding and appreciation for the value of art regardless of the cultures, time period, or individuals from which it may have come. One required field trip. This course satisfies the Expressive Arts - Fine Art Core Curriculum Domain. ($15 lab fee).
AR 102 Drawing I: 3 semester hours
The course will provide an introduction to the concepts, materials, and techniques of drawing. Instruction and practice in basic media will increase seeing ability, visualization, communication, and personal expression. Most drawing is done from life and emphasis is placed on visual communication. Since this is a required course for Art & Design majors the priority for acceptance in this course is: 1) Art & Design majors, 2) Art & Design minors, and 3) non-Art & Design majors. Lecture/critique: one hour per week. Studio: four hours per week. No prerequisites. ($25 lab fee).

AR 103 Art & Graphic Design Fundamentals: 3 semester hours
A study of the elements and principles of design in two- and three-dimensional works based upon design found both in nature and human-made art, which provides the student with opportunities for creative application. The design problems cover line, value, texture, color, and space. Various traditional and non-traditional techniques are used. Lecture: one hour per week. Studio: four hours per week. Since this is a required course for Art & Design majors the priority for acceptance in this course is: 1) Art & Design majors, 2) Art & Design minors, and 3) non-Art & Design majors. No prerequisites. ($50 lab fee).

AR 105 Introduction to the Studio: 3 semester hours
This course introduces students to broad studio techniques applicable to many branches of Studio Art and Graphic Design. Practical skills and solutions to the construction, fabrication, and presentation of creative work are explored in depth, and in a hands-on format. Knowledge gained in this course will prepare students to be successful in future Art, Graphic Design, and Art Education courses, and as practicing artists and designers following their degree. Artist interviews, career exploration, and field trips to area studios, museums, and professional art organizations are an essential element of this course. No prerequisites. ($50 lab fee).

AR 106 Photography I: 3 semester hours
An introduction to photography. The course covers cameras and photographic techniques, composition, processing and darkroom printing, lighting and matting photographs and an introduction to digital photography. A broad overview of the work of accomplished photographers, exploring many different styles and approaches will be presented along with the history of photography. Assignments stress composition, lighting, documentation, and experimentation. The course is recommended for students with little or no photography experience. Students should supply their own digital camera. A limited number of film cameras are available for loan. Students supply their own film. Lecture: one hour per week. Studio: four hours per week. Since this is a required course for Art & Design majors the priority for acceptance in this course is: 1) Art & Design majors, 2) Art & Design minors, and 3) non-Art & Design majors. No prerequisites. ($50 lab fee).

AR 109 Art Environments: 3 semester hours
This interdisciplinary arts course is for both non-Art & Design and Art & Design majors. Students will use a variety of non-traditional media and techniques to stretch their definition of the visual arts. Emphasis will be placed on studio experimentation with the arts of time, space, and concept. Students will use found materials, video, film, sound, language, and performance art to create objects, environments, and events. Emphasis is placed on questioning the processes by which meaning is constructed. Students interested in experimental music, writing, theatre, and visual arts (but who have no previous experience) are encouraged to enroll. Lecture/critique: one hour per week. Studio: four hours per week. No prerequisites. ($30 lab fee).

AR 120 Visual Technology: 3 semester hours
This course will emphasize fluency in industry-standard software tools relating to graphic design and computer-based illustration. Course will focus on raster image editing, vector-based illustration, and page layout. Peripherally, students will explore technical challenges such as server-based file management, font usage, and proper PDF proofing strategies. No prerequisites. ($25 lab fee).

AR 130 Graphic Design I: 3 semester hours
This course will explore into two-dimensional design beginning with conceptual foundations and continuing through to methods of practical application. A foundation of design language and space relationships is allied with creative problem-solving. Page layout, logo design, typography, computer graphics, and web page design are some of the practical areas covered. Since this is a required course for Graphic Design majors the priority for acceptance in this course is: 1) Graphic Design majors, 2) other Art & Design majors, 3) other Art & Design minors, and 4) non-Art & Design majors. Lecture/critique and studio: four hours per week. Prerequisite: AR 120 ($25 lab fee).

AR 141 Painting I: 3 semester hours
This course is an introductory course in oil and acrylic painting. Students will investigate both traditional and non-traditional solutions to compositional, technical, and aesthetic problems in painting. Lecture: one hour per week. Studio: four hours per week. No prerequisites. Since this is a required course for Art & Design majors the priority for acceptance in this course is: 1) Art & Design majors, 2) Art & Design minors, and 3) non-Art & Design majors. No prerequisites. ($90 lab fee).

AR 145 Watercolor: 3 semester hours
This course investigates the watercolor medium that includes materials, techniques, and creation of original watercolor paintings. It is an introduction to traditional and contemporary watercolor art and can be a springboard for personal expression in the medium. ($30 lab fee).

AR 146 Silkscreen: 3 semester hours
This studio course is designed to explore the possibilities of composing artwork in the various silkscreen printmaking techniques. Emphasis will be placed on the use of silkscreen as a contemporary fine arts medium and as a versatile and practical art skill. Processes such as the paper stencil, blockout resist, and direct photographic method are used. Priority for acceptance in this course is: 1) Art & Design majors, 2) Art & Design minors, and 3) non-Art & Design majors. Lecture/critique: one hour per week. Studio: four hours per week. No prerequisites. ($60 lab fee).

AR 151 Printmaking I: 3 semester hours
Investigation of graphic processes including woodcut, collagraph, monotype and intaglio. Course includes development of the image in black and white and color. Since this is a required course for Art & Design majors the priority for acceptance in this course is: 1) Art & Design majors, 2) Art & Design minors, and 3) non-Art & Design majors. Lecture: one hour per week. Studio: four hours per week. Prerequisite: AR 102. ($90 lab fee).

AR 161 Ceramics I: 3 semester hours
An introductory course in the ceramic arts providing students with an opportunity to use clay as a three-dimensional medium for self-expression. Both hand-building and wheel-throwing techniques will be taught. Priority for acceptance in this course is: 1) Art & Design majors, 2) Art & Design minors, and 3) non-Art & Design majors. Lecture: one hour per week. Studio: four hours per week. No prerequisites. ($100 lab fee).
AR 171 Sculpture I: 3 semester hours
The study of three-dimensional art as a basis for artistic sculptural experiences in a variety of basic media. The three-dimensional works will be developed in both additive and subtractive approaches using various materials. Since this is a required course for Art & Design majors the priority for acceptance in this course is: 1) Art & Design majors, 2) Art & Design minors, and 3) non-Art & Design majors. Lecture/critique: one hour per week. Studio: four hours per week. Prerequisite: sophomore standing and AR 103. ($100 lab fee).

AR 181 Fiber Arts: 3 semester hours
This course includes two- and three-dimensional studio problems in tie-dye, batik, weaving, printing on fabric, and a variety of contemporary fiber art techniques. Emphasis is placed on taking both traditional and contemporary approaches to fiber media, concepts, and processes. Priority for acceptance in this course is: 1) Art & Design majors, 2) Art & Design minors, and 3) non-Art & Design majors. Lecture: one hour per week. Studio: four hours per week. No prerequisites. ($80 lab fee).

AR 191 Jewelry: 3 semester hours
This course is an opportunity to create original adornment for covering the head to foot. It is designed to help beginners learn how to design and make jewelry from a variety of materials including metals, woods, and handmade papers. All the processes are based on hand construction that involves a minimum of hand tools. Attention will be given to the production of jewelry by various cultures and artists throughout the world. Lecture: one hour per week. Studio: four hours per week. No prerequisites. ($70 lab fee).

AR 202 Drawing II: 3 semester hours
This course is an extension of Drawing I. An exploration of various traditional and non-traditional drawing media, as well as a continuation of the student's search for personal vision through direct observation, memory, fantasy, and media experimentation. Emphasis is placed on development of personal imagery and work from live models. Since this is a required course for Art & Design majors the priority for acceptance in this course is: 1) Art & Design majors, 2) Art & Design minors, and 3) non-Art & Design majors. Lecture: one hour per week. Studio: four hours per week. Prerequisite: AR 102. ($70 lab fee).

AR 206 Photography II: 3 semester hours
This course is an extension of Photography I. It is designed to increase artistic and technical ability in the black and white photographic medium and to further explore digital photography. Photo II also includes studio lighting techniques, copy work, photographic imagery on nontraditional materials, and an investigation of non-silver photographic processes. Recommended for Art & Design, Public Relations and Communication majors, and others interested in photography. Priority for acceptance in this course is: 1) Art & Design majors, 2) Art & Design minors, and 3) non-Art & Design majors. Lecture and studio: five hours per week. Prerequisite: AR 106. ($55 lab fee).

AR 212 Art History I: 3 semester hours
This course is a survey of the major visual arts of the Western world from the prehistoric to the Gothic eras. Lecture: three hours per week. Prerequisite: sophomore standing and AR 101 or permission of the instructor. AR 212 and AR 213 may be taken in any order.

AR 213 Art History II: 3 semester hours
This course is a survey of the major visual arts of the Western world from Renaissance to Modernism. Prerequisite: sophomore standing and AR 101 or permission of the instructor. AR 212 and AR 213 may be taken in any order.

AR 216 History Of Non-Western Art: 3 semester hours
This survey course introduces non-Western cultural perspectives and artistic practices. Students will explore the major forms, styles, and purpose in the art and architecture of the Americas, Africa, India, China, Japan, Korea, and Australia and the Pacific Islands from prehistoric to contemporary periods. More than just studying the artworks themselves, students will gain an understanding of how these artworks are situated within the philosophical, religious, and political contexts of the cultures in which they were created. Prerequisites: Sophomore standing and AR 101, AR 212, AR 213, or permission of the instructor. Field trips are a required course component.

AR 220 Typography & Design: 3 semester hours
This course is an extension of Graphic Design I with emphasis on refined design sense, creative solutions to design problems, and practical application. From conception to completion, the student will be involved in the entire design process. Projects designed to acquaint students with various ways of using type are an integral part of the course. No prerequisite, but priority in class registration is given to Art and Design, and Communication majors. ($25 lab fee).

AR 230 Graphic Design II: Theory and Concepts: 3 semester hours
This course is an advanced study in painting and composition with an emphasis on experimentation in media, technique, and concept. Lecture: one hour per week. Studio: four hours per week. Prerequisite: AR 141. Priority for acceptance in this course is: 1) Art & Design majors, 2) Art & Design minors, and 3) non-Art & Design majors. ($40 lab fee).

AR 245 Relief Printmaking In Oaxaca, Mexico: 3 semester hours
Produce relief prints inspired by the rich cultural tradition and beauty of Oaxaca, Mexico. Students will observe and draw ruins at the archeological site of Monte Alban, artifacts at the regional museum and handsome handicrafts at the city markets. The drawings will be translated into relief prints by choosing from a variety of color processes including: the subtractive wood block, the multi-block linoleum, or cardboard collagraph. Students will also visit graphic arts galleries, museums, and artist's workshops. During their free time, students will have the opportunity to explore Oaxaca and the surrounding villages known for their handicrafts. No prerequisites. Travel costs required.

AR 246 Silkscreen II: 3 semester hours
This is an advanced studio course offering an opportunity to increase technical abilities and artistic concepts. The student will develop a series of prints using the various silkscreen techniques. Investigation into the history and use of silkscreen as an art form is encouraged. Individual critiques with the instructor are part of the course. Offered concurrently with AR 146. Prerequisite AR 146. ($60 lab fee).
AR 251 Printmaking II: 3 semester hours
This course is a continuation of study and investigation of graphic process including woodcut, collagraph, lithography, and all intaglio methods in both black and white and color. Investigation into the history and use of printmaking as an art form is required. Lecture one hour per week. Studio four hours per week. Prerequisite: AR 151. ($90 lab fee).

AR 261 Ceramics II: 3 semester hours
This intermediate-level ceramics course will provide students who have had a beginning ceramics course with further opportunity to use clay as a medium of self-expression. Students may work with hand-building and wheel-throwing techniques in creating both utilitarian and non-utilitarian ceramic objects. A variety of firing processes and glaze chemistry will be available. Lecture: one hour per week. Studio: four hours per week. Prerequisite: AR 161. Priority for acceptance in this course is: 1) Art & Design majors, 2) Art & Design minors, and 3) non-Art & Design majors. ($100 lab fee).

AR 271 Sculpture II: 3 semester hours
This is a course offering students an opportunity to develop further work in three dimensions. Various materials will be used. Growth in concepts and techniques is the heart of the work. Investigation into historical and contemporary sculptural work is part of the study. There are individual critiques with the instructor. Lecture: one hour per week. Studio Four hours per week. Prerequisite: AR 171. ($100 lab fee).

AR 280 Video on the Computer: 3 semester hours
This course is designed to acquaint students with video production and translation of video material into various presentation formats. A conceptual background and practical applications are interwoven to help understanding of the process. Topics included are organization of presentation and program material, visual communication principles, screen design and typography, video camera usage, video and audio recording techniques, creating and presentation. Recommended prerequisite: sophomore status. ($25 lab fee).

AR 290 Visual Arts Topics: 3 semester hours
This course allows examination of a specific visual art or art history topic. The course content and subtitles will vary at each presentation. Subjects as diverse as the interaction of color, 20th Century Painting, 19th and 20th Century Architecture and Mid-Eastern and Asian Art may be offered. A course with a different content may be repeated. Prerequisites: AR 101 or AR 212 or permission of the instructor.

AR 295 Survey Of Mexican Culture Today: 3 semester hours
Despite Mexico's proximity and its strong cultural influence on the southwestern United States, Mexico's Indian and Spanish traditions have made it a "distant neighbor." This course will attempt to bridge this gap between our two cultures with on-campus lectures on the history and art of Mexico followed by a 14 day travel experience to Mexico. During the Winter Term, students will travel to Mexico City, and Oaxaca. These Cities represent various aspects of Spanish colonial influence and will serve as a means to contrast large metropolitan centers with smaller scenic sites. Students will visit archaeological sites including Teotihuacan, Monte Alban and Maitla near Oaxaca. Students will be responsible for the completion of a course workbook and summary of required readings. Students also will have the opportunity to do a research paper or studio art project depending on one's interest. No prerequisites. Travel costs required.

AR 315 Contemporary Art and Theory: 3 semester hours
This course introduces students to worldwide contemporary artists, movements and the ideas that shaped them during the last fifty years. How have artists responded to cultural, social, economic and technological changes? What are the roles of art and artists right now? Life in the 21st century is increasingly complex as digitization and globalization force us to consider larger contexts in which art is made and viewed/used. We will explore some of these critical debates through visual lectures, readings, discussions, media presentations, and required field trips to cultural institutions. We'll examine contemporary art from a global perspective. Pre-requisite AR 213 or permission of instructor.

AR 330 Web and Motion Graphics: 3 semester hours
Web and Motion Graphics builds on the software foundation learned in AR 120 Visual Technology. Web and Motion Graphics focuses on software proficiency, specifically as it relates to web design and motion graphics production. Students will learn about web site organization, web interface design/page design, and page coding. Students will also receive an introduction to industry standard web animation and video editing software. Pre-requisite: AR 120 Visual Technology. ($25 lab fee).

AR 341 Painting III: 3 semester hours
This course is an advanced study of painting stressing independent work with an emphasis on creativity and critical thinking. Lecture one hour per week. Studio: four hours per week. Prerequisites: AR 141 and AR 241. Since this is a required course for Art & Design majors the priority for acceptance in this course is: 1) Art & Design majors, 2) Art & Design minors, and 3) non-Art & Design majors. ($40 lab fee).

AR 410 Senior Thesis Preparation: 1 semester hour
Senior thesis prep is required for all senior Art and Design majors the fall semester before taking AR 415 Senior Thesis and Exhibit. This course is designed to help seniors develop their thesis concept and media. Students do research and studio experiments as well as written statements related to their developing body of work. Weekly meetings involve all-faculty critiques as well as time for individual help with conceptual and technical problems. Students also gain experience presenting and installing artwork in a gallery setting. Prerequisite: Senior standing and the major portion of required art courses completed. ($50 lab fee).

AR 415 Senior Thesis & Exhibit: 3 semester hours
This course consisting of in-depth work on an aesthetic problem in the student's area of concentration. It is the examination of a total experience that establishes the basis for the aesthetic. Work is done independently with weekly group meetings and faculty checks of progress and portfolio development culminating in a thesis project and exhibition. Opportunities for participation in shows will be offered in the course. Prerequisite: All studio courses required for the major and AR 410. ($50 lab fee).

AR 425 Art Internship: 3 semester hours
The student intern will be placed in and art workplace. Placements will vary according to the student's interests and Art faculty recommendations. The internship is designed to give practical, on-the-job experience to complement academic studies and will be evaluated on a pass/fail basis. Three credits = 25 hours a week for five weeks or six credits = 25 hours a week for ten weeks. In addition to workplace hours, weekly contact with the supervision instructor is required throughout the duration of the internship. Please refer to the internship approval requirements in the catalog.
AR 445 Art Independent Study: 3 semester hours
Study topic will be arranged by the student and his/her advisor. Students should be Art and Design majors/minors and have taken all available courses in the general area of study. Priority will be given to juniors and seniors. (Lab fee dependent on topic).