Media, Integrated

Mass communication is the primary means by which our society relays news, information, and entertainment to the public. Technological advances have promoted instantaneous, global, and persistent presentation of images and ideas, both positive and negative. Mass Communication at BSU has traditionally been divided into three major areas: print, electronic, and advertising/public relations. In this age of media convergence, however, these traditional barriers are almost nonexistent. Therefore, our revised curriculum aims to prepare all students to communicate meaningful messages successfully, utilizing print, still and moving images, audio and multimedia technologies.

The Department of Integrated Media encourages students to stretch themselves by taking courses outside their area of interest and by completing a minor in another department. Writing skills are emphasized. Intensive classroom and laboratory experiences include the study of historical, practical, and theoretical aspects of mass communication. These experiences help prepare students for the rapid technological and social changes they will encounter as they move through their careers. Their preparation culminates in the completion of an academic thesis or a creative project with appropriate documentation.

It is hoped that these experiences will prepare students for the challenges they encounter as technologies and media formats continue to change rapidly. All students are required to attain a 2.50 GPA in their major courses before being approved for graduation with a Mass Communication major or minor. They are also required to successfully complete at least two semesters of second language, in preparation for the global media job market.

Programs

- Marketing Communication, B.S. *major*
- Mass Communication, B.S. *major*
- Mass Communication *minor*

Career Directions

Account Executive
Advertising Sales Person
Broadcaster
Editor
Information Manager
Journalist
Program Director
Program Producer
Public Relations Director
Station Manager
Also: Graduate Study

Preparation

Recommended High School Courses

Newspaper Production
Radio Production
Speech
Television Production
Writing

Marketing Communication, B.S. *major*

Required Credits: 54
Required GPA: 2.25

I REQUIRED COURSES

COMPLETE THE FOLLOWING COURSES:

- BUAD 3351 Management (3 credits)
- BUAD 3361 Marketing (3 credits)
- BUAD 3467 Advertising Management (3 credits)
- BUAD 3567 Consumer Behavior (3 credits)
- BUAD 3568 Personal Selling (3 credits)
- BUAD 3569 E-Marketing (3 credits)
- BUAD 4467 Marketing Research (3 credits)
- BUAD 4468 Marketing Management (3 credits)
- MASC 2600 Advertising (3 credits)
- MASC 2690 Public Relations (3 credits)
- MASC 2780 Culmination (3 credits)
- MASC 2850 Media Writing I (3 credits)
- MASC 3270 Media and Social Change (3 credits)
- MASC 3470 Multimedia Marketing (3 credits)
- MASC 3500 Media Design (3 credits)
- MASC 3600 Social Media Marketing (3 credits)
- MASC 4840 Portfolio (3 credits)

SELECT 1 OF THE FOLLOWING COURSES, 3 credits:

- MASC 4970 Internship (3 credits)
- BUAD 4970 Internship (1-12 credits)

SUGGESTED SEMESTER SCHEDULE FOR MARKETING COMMUNICATION, B.S. MAJOR

The following is a list of required Marketing Communication, B.S. major courses by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

Freshman

- Liberal Education Requirements

Sophomore

- BUAD 3361 Marketing (3 credits)
- MASC 2600 Advertising (3 credits)
- MASC 2690 Public Relations (3 credits)
- MASC 2780 Culmination (3 credits)
- MASC 3270 Media and Social Change (3 credits)
- MASC 3600 Social Media Marketing (3 credits)
- Liberal Education Requirements

Junior

- BUAD 3351 Management (3 credits)
- BUAD 3467 Advertising Management (3 credits)
- BUAD 3567 Consumer Behavior (3 credits)
- BUAD 3569 E-Marketing (3 credits)
- BUAD 4467 Marketing Research (3 credits)
- MASC 3500 Media Design (3 credits)
- MASC Internship
- Liberal Education Requirements

Senior

- BUAD 3568 Personal Selling (3 credits)
- BUAD 4468 Marketing Management (3 credits)
- MASC 3470 Multimedia Marketing (3 credits)
- MASC 4840 Portfolio (3 credits)
- MASC 4970 Internship (3 credits)
  or BUAD 4970 Internship (1-12 credits) taken for 3 credits
- Liberal Education Requirements

Mass Communication, B.S. *major*

Required Credits: 60
Required GPA: 2.50

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- MASC 1500 Making Media (1 credit)
- MASC 2243 Video Editing (3 credits)
- MASC 2250 Media Production I (3 credits)
- MASC 2460 Digital Photography (3 credits)
- MASC 2780 Culmination (3 credits)
- MASC 2850 Media Writing I (3 credits)
- MASC 3111 Student Media Practicum I (1 credit)
- MASC 3112 Student Media Practicum II (1 credit)
- MASC 3251 Media Production II (3 credits)
- MASC 3270 Media and Social Change (3 credits)
- MASC 3720 Media Writing II (3 credits)
- MASC 3850 Media Ethics and Law (3 credits)
- MASC 4840 Portfolio (3 credits)

COMPLETE THE FOLLOWING COURSE (3 CREDITS):

- MASC 4970 Internship (3 credits)

SELECT ONE OF THE FOLLOWING COURSES:

- MASC 1100 Mass Media and Society (3 credits)
- MASC 2600 Advertising (3 credits)
- MASC 2690 Public Relations (3 credits)

II REQUIRED ELECTIVES

SELECT 21 SEMESTER CREDITS OF ELECTIVES FROM THE FOLLOWING COURSES:
Electives chosen must meet departmental approval.

- MASC 1100 Mass Media and Society (3 credits)
- MASC 2600 Advertising (3 credits)
- MASC 2690 Public Relations (3 credits)
- MASC 2925 People of the Environment: Mass Media Perspectives (3 credits)
- MASC 3110 Media Content Creation (3 credits)
- MASC 3150 Photojournalism (3 credits)
- MASC 3210 Headwaters Film Festival (2 credits)
- MASC 3300 Independent Film (1 credit)
- MASC 3330 Performance and Production (3 credits)
- MASC 3450 Advanced Field Production (3 credits)
- MASC 3470 Multimedia Marketing (3 credits)
- MASC 3480 Advanced Audio Production (3 credits)
- MASC 3500 Media Design (3 credits)
- MASC 3600 Social Media Marketing (3 credits)
- MASC 3650 Media Production for Social Entrepreneurship (3 credits)
- MASC 3670 Documentary Film (3 credits)
- MASC 3750 Communication History (3 credits)
- MASC 3790 Screenwriting (3 credits)
- MASC 3900 Topics in Mass Communication (1-3 credits)
  or MASC 4900 Topics in Mass Communication (1-3 credits)
- MASC 4303 Final Media Showcase (3 credits)
- MASC 4312 Production Company (3 credits)
- MASC 4330 Engineering for Electronic Media (3 credits)
- MASC 4333 Multi-Platform Storytelling (3 credits)
- MASC 4340 Digital Cinema (3 credits)
- MASC 4450 Multimedia Production (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR MASS COMMUNICATION, B.S. MAJOR

The following is a list of required Mass Communication, B.S. major courses by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

Freshman

- MASC 1500 Making Media (1 credit)
- MASC 2243 Video Editing (3 credits)
- MASC 2460 Digital Photography (3 credits)
- MASC 2850 Media Writing I (3 credits)
- Liberal Education Requirements (MASC 1100 Mass Media and Society fulfills Goal Area 9)

Sophomore

- MASC 2250 Media Production I (3 credits)
- MASC 2780 Culmination (3 credits)
- MASC 3111 Student Media Practicum I (1 credit)
- MASC 3251 Media Production II (3 credits)
- MASC 3450 Advanced Field Production (3 credits)
- MASC 3720 Media Writing II (3 credits)
- Choose from
  MASC 1100 Mass Media and Society (3 credits)
  MASC 2600 Advertising (3 credits)
  MASC 2690 Public Relations (3 credits)
- MASC Required Electives
- Liberal Education Requirements

Junior

- MASC 3270 Media and Social Change (3 credits)
- MASC 3850 Media Ethics and Law (3 credits)
- MASC 3112 Student Media Practicum II (1 credit)
- MASC 3150 Photojournalism (3 credits)
- MASC 3480 Advanced Audio Production (3 credits)
- MASC 3330 Performance and Production (3 credits)
- MASC 3500 Media Design (3 credits)
- MASC 3600 Social Media Marketing (3 credits)
- MASC 4970 Internship (3 credits)
- MASC Required Electives
- Liberal Education Requirements

Senior

- MASC 4333 Multi-Platform Storytelling (3 credits)
- MASC 4450 Multimedia Production (3 credits)
- MASC 4303 Final Media Showcase (3 credits)
- MASC 4312 Production Company (3 credits)
- MASC 4840 Portfolio (3 credits)
- MASC 4970 Internship (3 credits)
- MASC Required Electives
- Liberal Education Requirements

Mass Communication *minor*

Required Credits: 18
Required GPA: 2.50

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- MASC 2850 Media Writing I (3 credits)
- MASC 3850 Media Ethics and Law (3 credits)

SELECT 3 OF THE FOLLOWING COURSES:

- MASC 2243 Video Editing (3 credits)
- MASC 2250 Media Production I (3 credits)
- MASC 2460 Digital Photography (3 credits)
- MASC 3110 Media Content Creation (3 credits)
- MASC 3150 Photojournalism (3 credits)
- MASC 3330 Performance and Production (3 credits)
- MASC 3470 Multimedia Marketing (3 credits)
- MASC 3480 Advanced Audio Production (3 credits)
- MASC 3500 Media Design (3 credits)
- MASC 3600 Social Media Marketing (3 credits)
- MASC 3650 Media Production for Social Entrepreneurship (3 credits)
- MASC 3670 Documentary Film (3 credits)
- MASC 3720 Media Writing II (3 credits)
- MASC 3790 Screenwriting (3 credits)
- MASC 4333 Multi-Platform Storytelling (3 credits)
- MASC 4340 Digital Cinema (3 credits)
- MASC 4450 Multimedia Production (3 credits)

II REQUIRED ELECTIVES

SELECT 3 SEMESTER CREDITS FROM MASS COMMUNICATION COURSES AT THE 2000 LEVEL OR ABOVE

Mass Communications Courses

MASC 1100 Mass Media and Society (3 credits)
Technology changes us. This class explores how the technology we use shifts our thoughts, feelings, behaviors, and societies. We will better understand the history and evolution of media-from cave art to the Internet. And we will study how the content of our media,pornography, conspiracy theories, propaganda, Harry Potter alters and reflects how we think. We will use various theoretical approaches to understand the ways we are shaped by our media ecosystems. Liberal Education Goal Areas 5 and 9.

MASC 1500 Making Media (1 credit)
This course introduces students to the field of mass media by exploring the variety of forms and processes that shape the media landscape; i.e. television, radio, cinema, print, podcasts, web-based streaming, etc. Students new to the Mass Communication major will also be introduced to a variety of student media opportunities including KBSU-TV, FM90, the Northern Student and the Headwaters Film Festival. Liberal Education Goal Area 11.

MASC 2100 Minorities in the Media (3 credits)
Theoretical and applied aspects of the coverage of disenfranchised groups by the mass media. Students should gain an understanding of the complexity of the cultural, political, and economic forces that shape media coverage of disenfranchised groups. Through case studies, research, class discussion, and reporting and producing one or more stories, students learn how groups outside the power structure in society are portrayed in the mainstream media. Liberal Education Goal Areas 7 & 9.

MASC 2243 Video Editing (3 credits)
Video editing is a skill that is in demand for almost every discipline. We'll emphasize storytelling, you'll develop or improve your video editing skills, and study the aesthetics of editing. External storage device required.

MASC 2250 Media Production I (3 credits)
This course provides an introduction to the creative process and tools of audio and video production from a convergent media perspective. Students create their own audio and video productions in order to gain hands-on experience in the creative process of media production in a studio and on-location. Prerequisite or Co-requisite: MASC 2243.

MASC 2460 Digital Photography (3 credits)
Theoretical and applied aspects of digital photography, including camera handling and Photoshop. Students become familiar with all aspects of operating a 35 mm camera and producing quality photographs for media-related work. A survey of the history and principles involved in producing digital photographs, transferring them to computers, enhancing them with software, and incorporating them in publications. Readings, discussions, and individual productions are utilized to familiarize students with the production of digital photos. Lab time required. Digital cameras provided. Lab fees.

MASC 2600 Advertising (3 credits)
Advertising is everywhere and we are bombarded by a great number of mediated messages each day. This course examines the theoretical and practical aspects of advertising and gives an overview of the field. Students will gain an increased awareness of how advertising works, where it fits into the fabric of our society, and how it is used--sometimes ethically and sometimes not. The course incorporates lecture, discussion, and projects and students analyze print, broadcast and digital advertising.

MASC 2690 Public Relations (3 credits)
Learn the strategic planning process of doing public relations work and how to create a public relations plan. Students will learn and apply the various tactics used by public relations professionals to meet organizational goals.

MASC 2780 Culmination (3 credits)
Prepares students to apply for an internship or job. Students will work on their resumes, portfolio and interview skills, as well as explore and discuss how their passion, values, skills and abilities play out in their personal and professional life.

MASC 2850 Media Writing I (3 credits)
You will learn the basics of media writing, how to craft good stories, and to how to shape those stories to fit a variety of media, such as: news, marketing, public relations, broadcast, and social media.

MASC 2925 People of the Environment: Mass Media Perspectives (3 credits)
For both majors and non-majors. Theoretical aspects of the effect of the mass media on environmental processes. Students should gain an understanding of the complexity of the cultural, political, and economic forces that shape media coverage of the environment, and the importance of such an understanding to maintaining a sustainable global environment. The course is a discussion section of the interdisciplanary lecture on environmental issues for liberal education. Liberal Education Goal Area 10.

MASC 2970 Internship (3 credits)
Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

MASC 3110 Media Content Creation (3 credits)
You will be producing a weekly TV newscast from stories around campus and around the area. These programs will appear on KBSU-TV Channel 17, and FM90. Each week you'll be assigned a role within the production. This will be a collaborative class. Prerequisites: MASC 2250 and MASC 3251.

MASC 3111 Student Media Practicum I (1 credit)
This practicum is designed to give students hands-on learning opportunities by working for the student media. Students will work with one of the three student media outlets: Northern Student magazine and website, KBSU-TV television station or FM-90 radio station. Students may work with story and program creation, or on the business and advertising side of the student media. Prerequisite(s): consent of the instructor.

MASC 3112 Student Media Practicum II (1 credit)
This practicum will build on the skills learned in Student Media Practicum I. Students will continue to work with the Northern Student magazine and website, KBSU-TV television station or FM-90 radio station, but may take leadership roles and work on more in-depth projects. Students may work with story and program creation, or on the business and advertising side of the student media. Prerequisite(s): MASC 3111 and consent of the instructor.

MASC 3150 Photojournalism (3 credits)
Applied aspects of press photography and picture editing. Students should gain competence in creating photographs and designing and laying out photo essays. Demonstration and hands-on experience covers darkroom processing, picture story planning and execution, and computer manipulation of images. The course concentrates on the application of basic principles of both photography and journalism, and requires laboratory work, as well as in-class participation. Prerequisites: MASC 2460.(May not be offered every year.)

MASC 3210 Headwaters Film Festival (2 credits)
Event planning is a sought after skill. Students work in teams to plan and organize the programming, hospitality, fundraising, communication, promotion, judging management and technical parts of a large event - the Headwaters Film Fest.

MASC 3251 Media Production II (3 credits)
This class is designed to give a student an introduction to the broadcast television environment. The course will provide a path to the creative process utilizing visual tools to develop media story experiences. Students will become skilled in video equipment operation utilizing the department's television facilities. These skills will be taught through hands-on experiences in the creative process of media production. These objectives will be accomplished through classroom lectures, discussions, group activities and on-air presentations. The majority of the learning in this course will involve hands-on field experiences in a controlled laboratory environment. Prerequisites: MASC 2243 and MASC 2250.

MASC 3270 Media and Social Change (3 credits)
This course examines how media organizations and social activists alike communicate their messages to wide audiences in order to achieve social change. It explores critical and theoretical approaches to understanding contemporary mass media. Students learn to analyze media from across political, popular, and professional cultures. Prerequisites: MASC 2850 and junior or senior status.

MASC 3300 Independent Film (1 credit)
Two mandatory meetings (flexible--two hours each day) at the Headwaters Film Festival on the Bemidji State campus OR online. This online course examines contemporary independent film -- techniques and aesthetics, history, and the business side -- funding models and distribution avenues. Liberal Education Goal Area 6.

MASC 3330 Performance and Production (3 credits)
This is an advanced media production course that provides an in-depth understanding of live programming, production, and field reporting. Students are taught how to perform professionally on-air in television, radio and web-based streaming environments. Prerequisites: MASC 3450 and MASC 3480.

MASC 3450 Advanced Field Production (3 credits)
An advanced media course in which students learn hands-on, single camera production on-location. Areas of study include documentary, advanced news gathering, and experimental/music video. All projects are edited with non-linear computer systems and published to DVD and Web. Lab hours required. Prerequisites: MASC 2250 and MASC 3251.

MASC 3470 Multimedia Marketing (3 credits)
This course focuses on reaching potential customers through the use of multimedia content marketing. Using video, photos, audio and text, you will learn content marketing strategies and how to create content that delivers information about your product or services to your target audience.

MASC 3480 Advanced Audio Production (3 credits)
This course emphasizes the techniques of advanced audio production through hands-on experience in script writing, multiple-source audio recording, and multi-track editing. Students will be able to use the techniques learned in this class to produce advanced audio documentaries, advertisements, audio drama or sound tracks for film and video. In addition to lecture and demonstration, this course involves one-on-one, hands-on experience learning. A considerable amount of laboratory time is devoted to completing assigned audio productions. Each student will become proficient at the creative production process in-studio and on-location. The student will master their vocal abilities and become proficient at the production of creative audio ads. This course builds confidence in your production ability. Prerequisites: MASC 2243 and MASC 2250.

MASC 3500 Media Design (3 credits)
Good visual design is everywhere; from ads and magazines, to mobile content and websites, to marketing reports and brochures. Learn and apply effective design principles to a variety of projects using Adobe InDesign. Also learn the basics of interactive digital publishing.

MASC 3600 Social Media Marketing (3 credits)
Social media has moved from a pastime to a professional endeavor. This course introduces the major social media platforms and theoretical constructs and examines how companies use social media for marketing, analytics and customer service. This course will give future media and communications professionals practical experience needed to successfully utilize social media for strategic endeavors.

MASC 3650 Media Production for Social Entrepreneurship (3 credits)
Are you passionate about solving social and environmental problems? We'll study social entrepreneurship -- a rapidly growing field that uses standard business methods to address problems. You'll work collaboratively to create a business model, pitch and video to promote your business.

MASC 3670 Documentary Film (3 credits)
Historical overview of the genre. Students view and analyze a variety of documentary films to gain an understanding of their purpose, their impact, their audiences, and their cultural and artistic value. (Might not be offered every year.)

MASC 3720 Media Writing II (3 credits)
Knowing how to research and write a good story is important for many professions: journalism, public relations, marketing, blogging and advertising. This class will teach you the important skills of researching, reporting and writing stories. Prerequisite: MASC 2850.

MASC 3750 Communication History (3 credits)
A survey in communication technologies from prehistory to contemporary times. This course will examine the important historical developments in human communication and will explore how these advances shaped the modern world.

MASC 3790 Screenwriting (3 credits)
This is an advanced writing course in which students learn the process of writing a dramatic screenplay for film and digital cinema. Students learn to develop the critical dramatic elements that are central to a successful screenplay: characterization, plot development, and cinematic description. Each student develops and writes a screenplay that is formatted to film industry standards. Prerequisites: ENGL 1151 or MASC 2850 (Might not be offered every year.)

MASC 3850 Media Ethics and Law (3 credits)
This course introduces students to the study of media ethics and the principles of media law as they apply to the work of media and communications professionals in a variety of fields. Examines the principles on which American law is based and discusses the creation, interpretation and the role of law, while analyzing ethical issues through case studies concerned with different media, including advertising, film, photojournalism, print and broadcast journalism, public relations, television and World Wide Web. Introduces a variety of key issues in media law and ethics and demonstrates the complexities in reaching outcomes.

MASC 3900 Topics in Mass Communication (1-3 credits)
Study of a specific mass communication topic or development, person, or time period, with the specific title being announced in each semester's class schedule.

MASC 4303 Final Media Showcase (3 credits)
Students will produce a 'calling card' project with advice and guidance from faculty. The project will represent the student's highest achievement in media production. Projects can include audio recordings, video, live broadcast, digital cinema, and other emerging media. All students present their projects at a public showcase at the end of the semester. Students must complete a proposal and project timeline and submit it to the instructor prior to registration. Prerequisite(s): MASC 3330, MASC 4312 and have senior status.

MASC 4312 Production Company (3 credits)
Build your resume and portfolio with practical experience working with real clients. Work collaboratively with community organizations and businesses to analyze needs, develop plans, and create media and marketing products. Prerequisites: MASC 3450 and MASC 3480.

MASC 4330 Engineering for Electronic Media (3 credits)
A very practical "mini course" in electronic fundamentals. Explores the basic theory of how things function in a broadcast environment. Practical use and repair of audio/video connectors, components, and circuitry. Reading of instruments, levels, and oscilloscope patterns in a television/radio studio. Techniques of soldering connectors, and cable repair used in everyday television/radio stations. Audio theory and components, as well as video signal operation. At the end of this course, students will have sufficient electronic knowledge to pass the FCC Amateur Radio license exam. This class builds confidence and understanding of broadcast operations. Lab hours required. Prerequisites: MASC 2250 and MASC 3251.

MASC 4333 Multi-Platform Storytelling (3 credits)
You will be reporting, writing, and producing stories from around campus and around the area. These will appear on air, in print, and on the Web. Each week, you'll pitch stories and be assigned a duty within the team. This will be a collaborative class, but you will individually get several bylines throughout the semester. Prerequisites: MASC 2460 and MASC 3720.

MASC 4340 Digital Cinema (3 credits)
Introduction to the theory and practice of motion picture filmmaking as it applies to digital media. An interdisciplinary group of students work together to make short films that manifest their ideas and beliefs. Topics include familiarity with filmmaking equipment; basic cinematic techniques; converting ideas to images; the use of lighting, editing, and sound in cinema; scheduling, casting, and location scouting; and the role of acting, directing, and good storytelling in the filmmaking process. Prerequisites: MASC 2243 and MASC 2250 preferred for Mass Communication majors. (Might not be offered every year.)

MASC 4450 Multimedia Production (3 credits)
Learn how to conceptualize and create multimedia projects. This course gives instruction on how to research and produce content across platforms using video, photos, audio and text to create in-depth projects. Prerequisites: MASC 3150, MASC 4333 and senior status.

MASC 4840 Portfolio (3 credits)
This course helps students organize and complete a professional portfolio. Students will present their portfolio to faculty and media professionals, and they will receive a constructive, one-on-one evaluation of their work from a variety of media, marketing and advertising professionals. Prerequisite(s): MASC 2780, Mass Communication or Marketing Communication major and have senior status.

MASC 4900 Topics in Mass Communication (1-3 credits)
Study of a specific mass communication topic or development, person, or time period, with the specific title being announced in each semester's class schedule.

MASC 4970 Internship (3 credits)
Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
1940, 2940, 3940, 4940 IN-SERVICE COURSE
1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS