

CHAPTER 6

The Colleges and Schools

COLLEGE OF AGRICULTURE AND NATURAL RESOURCES

0107 Symons Hall, 301-405-7761
E-mail: eweiss@deans.umd.edu
www.agnr.umd.edu

Dean: Cheng-i Wei
Associate Dean: Leon H. Slaughter
Assistant Dean: John A. Doerr

The College of Agriculture and Natural Resources offers a variety of academic programs that apply science, management, design, and engineering to improve the world in which we live and work. Feeding the world population, developing scientifically-based land use practices and policies, understanding animal and plant biology, improving nutrition and its effects on human health, and profitably managing farms and agribusinesses in harmony with ecosystems are all vital concerns of the College. Integrating the use and protection of natural resources in the production of food and nursery crops is a challenge facing students.

Each student in the College is assigned a faculty advisor to assist in selecting courses to meet the individual needs of our diverse student body. In addition to course work, undergraduates have opportunities to work closely with faculty in state-of-the-art facilities including new biological resources engineering, animal sciences, veterinary medicine, and plant sciences buildings. The College also serves as the academic home of the Maryland Campus of the Virginia-Maryland Regional College of Veterinary Medicine. Nearby resources such as the U.S. Department of Agriculture's Beltsville Agricultural National Research Center, the National Institutes of Health, the Food and Drug Administration, the Smithsonian Institution and the National Zoo, Maryland's Departments of Agriculture and Natural Resources, and the Patuxent Wildlife Research Center enhance teaching, research, internship, and career opportunities for students. Field study courses offered in Brazil, Belize, Egypt, England, and Costa Rica, and study-abroad programs such as those in Russia and Angers, France expose students to other cultures and environments. Learning opportunities are also strengthened through student involvement in such co-curricular activities as the College Honors Program, career programs, leadership workshops, and student clubs.

Graduates are employed in a variety of professions as dietitians, food scientists, landscape architects, engineers, natural resource managers, environmental consultants, land use planners, agribusiness managers, stock and commodity brokers, or lawyers specializing in environmental issues. Others work at government and industry research laboratories, biotechnology and biomedical firms, and in hospitals, fish and wildlife programs, the Peace Corps, public health departments, and large food-production operations. Many graduates pursue advanced degrees in veterinary medicine, law, medicine, physical therapy, or graduate school.

Departments in the College of Agriculture and Natural Resources offer the following programs of study:

Agricultural and Resource Economics—Business Management; Agricultural Science; Environmental and Resource Policy; Food Production; International Agriculture; and Political Process.

Animal Sciences—Animal Care and Management; Equine Studies; Laboratory Animal Care; Science/Preprofessional; and Animal Biotechnology

Combined Agriculture/Veterinary Medicine

Biological Resources Engineering—Water Resources; Bioenvironmental Engineering; Aquacultural Engineering; and Biomedical Engineering.

Environmental Science and Policy—Environment & Agriculture, Environmental Economics, Environmental Restoration, Soil, Water, & Land Resources, and Wildlife Resources & Conservation.

Natural Resource Sciences—Conservation of Soil, Water and Environment, Horticulture and Crop Production, Landscape Management, Plant Sciences, Turf and Golf Course Management, and Urban Forestry.

General Agricultural Sciences

Landscape Architecture

Natural Resources Management—Environmental Education/Park Management; Land and Water Resource Management; and Plant and Wildlife Resource Management.

Nutrition and Food Science—Dietetics; Food Science; and Nutritional Science.

Advantage of Location and Facilities

Educational opportunities in the College of Agriculture and Natural Resources are enhanced by the proximity of several research units of the federal government. Teaching and research activities in the College are conducted with the cooperation of scientists and professional people in government positions. Of particular interest are the National Agricultural Research Center at Beltsville, the National Agricultural Library, the National Arboretum, and the Food and Drug Administration.

Instruction in the basic biological and physical sciences, social sciences, landscape design, and engineering principles is conducted in well-designed classrooms and laboratories. The application of basic principles to practical situations is demonstrated for the student in numerous ways. In addition to on-campus facilities, several operating education and research facilities are located throughout Maryland. Horticultural and agronomic crops, turf, beef, dairy cattle, and poultry are maintained under practical and research conditions also used for environmental studies.

Requirements for Admission

It is recommended that students entering the College of Agriculture and Natural Resources have completed a high school preparatory course that includes: English, 4 units; mathematics, 3 units; biological and physical sciences, 3 units; and history or social sciences, 2 units. Four units of mathematics should be elected by students who plan to major in biological resources engineering. The Landscape Architecture major is a limited enrollment program (LEP). See chapter 1 for general limited-enrollment program admission policies.

Degree Requirements

Students graduating from the College must complete at least 120 credits with a grade point average of 2.0 in all courses applicable toward the degree. Requirements of the major and supporting areas are listed under individual program headings in chapter 7.

Advising

Each student in the College of Agriculture and Natural Resources is assigned to a faculty advisor. Advisors normally work with a limited number of students and are able to give individual guidance. Students entering the freshman year with a definite choice of curriculum are assigned to departmental advisors for counsel and planning of all academic programs. Students who have not selected a definite curriculum are assigned to a general advisor who assists with the choice of electives and acquaints students with opportunities in the curricula in the College of Agriculture and Natural Resources and in other units of the university.

Financial Assistance

A number of scholarships are available for students enrolled in the College of Agriculture and Natural Resources. These include awards by the Agricultural Development Fund, Arthur M. Ahalt Memorial Scholarship, Attorney General's Scholarship, Beltsville Garden Club Scholarship, Bruce and Donna Berlage Scholarship, Chester F. Bletch Fund, Bowie-Crofton Garden Club Scholarship, Frank D. Brown Memorial Scholarship, Jonas and Joan Cash Student Award, Chapel Valley Landscape Company Honorary Scholarship, George Earle Cook, Jr. Scholarship Fund, Ernest T. Cullen Memorial Scholarship, Jaime Dannemann Scholarship, Richard F. Davis Memorial Award, Jerry V. DeBarthe Memorial Fund, William R. DeLauder Fund, Mylo S. Downey Memorial Scholarship, Robert Facchina/Johanna Foods Scholarship, James R. Ferguson Memorial Scholarship, Kenneth S. Fowler Memorial Fund, Thomas A. Fretz Agriculture and Natural Resources Scholarship, H. Palmer Hopkins Scholarship, Donald Leishear International Travel Scholarship, Goddard Memorial Scholarship, Manasses J. and Susanna Grove Memorial Scholarship, Maryland Greenhouse Growers Association Scholarship, Maryland Nurserymen's Association Scholarships, John and Marjorie Moore International Agriculture and Natural Resources Student Travel Fund, James and Dessie Moxley Scholarship, Paul R. Poffenberger Scholarship Fund, Jennifer Russo Memorial Scholarship, the Ross and Pauline Smith Fund, J. Herbert Snyder Scholarship, Southern States Cooperative, Inc., Hiran I. Stone Memorial Scholarship, T. B. Symons Memorial Scholarship, the A.F. Vierheller Award Fund in Horticulture, Siegfried Weisberger Jr. Scholarship Fund, Theodore B. and Georgianna Miles Weiss Memorial Fund, and the Winslow Foundation Scholarship.

The College is privileged to offer additional support in the form of interest-free loans through the Catherine Brinkley Loan Fund which is available to students who are residents of Maryland and progressing in programs within the College of Agriculture and Natural Resources.

Honors

Students may apply for admission to the College Honors program after completing 56 credits with a minimum 3.2 GPA in a program within the College. Honors students work with a faculty mentor and must take at least 12 credits of honors courses including a senior thesis. Interested students should contact their faculty advisor.

Student Organizations

Students find opportunity for varied expression and growth in the several voluntary organizations sponsored by the College of Agriculture and Natural Resources. These organizations are AGNR Student Ambassadors, AGNR Student Council, Alpha Zeta, Agribusiness Club, Agronomy Club, Alpha Gamma Rho, Animal Husbandry Club, ASAE, the Society for Engineering in Agricultural, Food and Biological Systems, College Park Environmental Group, Collegiate 4-H, Collegiate FFA, Food and Nutrition Club, Horticulture Club, Landscape Architecture Student Association, INAG Club, Natural Resources Management Society, Animal Sciences Graduate Association/Poultry Science Club, Sigma Alpha, Soil and Water Conservation Society UMCP Student Chapter, Symbiosis, Equestrian Club, UM Food Technology Club, and Veterinary Science Club.

Research and Service Units

Maryland Agricultural Experiment Station

The Maryland Agricultural Experiment Station (MAES) supports research conducted primarily by 120 faculty scientists located within the College of Agriculture and Natural Resources. Faculty use state-of-the-art facilities such as a new Research Greenhouse Complex and Environmental Simulator, as well as 10 off-campus research locations, for research in the science, business, policy, and practice of agriculture. MAES supports research that benefits consumers and producers alike; for example, our significant focus

on the environment protects valuable natural resources such as the Chesapeake Bay. Undergraduate students also benefit from mentoring by MAES-supported faculty and instructional use of MAES facilities statewide.

Cooperative Extension Service

The Maryland Cooperative Extension Service (MCES) educates citizens in the application of practical, research-based knowledge to critical issues in agricultural and agribusiness including aquaculture; natural resources and the environment; human development, nutrition, diet, and health; youth development and 4-H; and family and community leadership. The statewide program includes more than 180 faculty and support staff located in 23 counties, the City of Baltimore, four regional centers, and the University of Maryland's College Park and Eastern Shore campuses. In addition, more than 15,000 volunteers and citizens in Maryland give generously of their time and energy.

Virginia-Maryland Regional College of Veterinary Medicine, Maryland Campus

College of Agriculture and Natural Resources
1202 Gudelsky Veterinary Center, 301-314-6830
www.vetmed.vt.edu

The Virginia-Maryland Regional College of Veterinary Medicine is operated by the University of Maryland and the Virginia Polytechnic Institute and State University. Each year, 30 Maryland and 50 Virginia residents comprise the entering class of a four-year program leading to a Doctor of Veterinary Medicine (DVM).

The first three years are given at Virginia Polytechnic Institute and State University in Blacksburg, Virginia. The final year of instruction is given at several locations, including the University of Maryland, College Park.

A student desiring admission to the college must complete the pre-veterinary requirements and apply for admission to the professional curriculum. Admission to this program is competitive, and open to all Maryland residents. All Maryland residents' applications are processed at the College of Veterinary Medicine, Maryland Campus, University of Maryland, College Park.

Institute of Applied Agriculture (Two-Year Program)

E-mail: iaa@umail.umd.edu
www.iaa.umd.edu

The Institute of Applied Agriculture (IAA) awards academic certificates in Equine Business Management, General Ornamental Horticulture, Golf Course Management, Landscape Management, and Turfgrass Management. As a two-year program, the IAA has a separate admission policy. Upon completion of the program, students are welcome to transfer to the University of Maryland, College Park; University of Maryland University College; and other schools.

For more information about the IAA, its admissions procedures, and requirements, contact the Institute of Applied Agriculture, 2123 Jull Hall, University of Maryland, College Park, MD 20742-2525. Phone: 301-405-4686. Information is also available on the Institute's home page and via E-mail (see addresses above).

Course Code: AGNR

SCHOOL OF ARCHITECTURE, PLANNING, AND PRESERVATION (ARCH)

Architecture Building, 301-405-8000
www.arch.umd.edu

Dean: Garth Rockcastle
Associate Dean: Stephen F. Sachs
Associate Dean: John W. Maudlin-Jeronimo
Associate Dean: Lee W. Waldrep, Ph.D.
Professors: Bechhoefer†, Bennett, Bowden, Du Puy, Etlin†, Francescato, Lewis, Schumacher, Vann
Associate Professors: Bell, Bovill, Eisenbach, Gardner, Gournay, Kelly
Assistant Professors: Ambrose, Oakley, Wortham
Lecturer: McInturff
Professor Emeritus: Fogle, Hill, Schlesinger
†Distinguished University Professor

52 School of Architecture, Planning, and Preservation

The School of Architecture, Planning, and Preservation offers a four-year undergraduate program leading to the Bachelor of Science degree in architecture, and a graduate program leading to the professional degree of Master of Architecture. The undergraduate major in architecture is designed to minimize the time required to complete the curriculum leading to the professional degree.

Students receive rigorous and comprehensive instruction from a faculty whose members are active in professional practice or research. Many faculty members have distinguished themselves across the professional spectrum and represent different approaches to architectural design. Their individual areas of expertise include architectural design and theory, history, architectural archaeology, technology, urban design and planning, and historic preservation. Visiting critics, lecturers, and the Kea Distinguished Professor augment the faculty; together they provide students with the requisite exposure to contemporary realities of architectural design.

The B.S. degree in architecture will qualify graduates to pursue a career in any of a number of fields, such as construction, real estate development, public administration, or historic preservation, or to continue in graduate work in professional fields such as architecture, urban planning, historic preservation, landscape architecture, or law.

Recruitment

Directed Electives	3
Core Requirements	3
Total	32

Fourth Year

ARCH 402 Architecture Studio III	6
ARCH 412 Architectural Technology III	4
Directed History of Architecture Elective**	3
ARCH 403 Architecture Studio IV	6
ARCH 413 Architectural Technology IV	4
Directed Electives	6
CORE Requirements	6
Total	29
Total Credits	120

*Courses are to be taken in sequence as indicated by Roman numerals in course titles.

**Directed Architecture history courses: ARCH 420, 422, 423, 432, 433, 434, and 436

Special Resources and Opportunities

The school is housed in a modern, air-conditioned building providing design workstations for each student, a large auditorium, and seminar and classroom facilities. A well-equipped woodworking and model shop, and computer graphics facilities are also provided. The Architecture Library, one of the finest in the nation, offers convenient access to a current circulating collection of more than 24,000 volumes, 6,000 periodicals, and an extensive selection of reference materials. Rare books and special acquisitions include a collection relating to international expositions and the 11,000-volume National Trust for Historic Preservation Library. The Elizabeth D. Alley Visual Resources Collection includes a reserve collection of 320,000 slides on architecture, landscape architecture, urban planning, architectural science, and technology as well as audio-visual equipment for classroom and studio use.

Summer programs include travel to Rome, Paris, Turkey, Great Britain, and other countries. Students may earn direct credit doing hands-on restoration work and by attending lectures by visiting architects, preservationists, and scholars.

Course Code: ARCH

COLLEGE OF ARTS AND HUMANITIES (ARHU)

1102 Francis Scott Key Hall, 301-405-2088
www.arhu.umd.edu

Professor and Dean: James Harris
 Office of Student Affairs: 301-405-2110
 Academic Advisors: 301-405-2108
www.arhu.umd.edu/studentresources/osa

The College of Arts and Humanities embraces a heterogeneous group of disciplines, all of which value the development of critical thinking, fluent expression in writing and speech, sensitivity to ethical and aesthetic standards, and a complex understanding of history and culture. Departments and programs in Arts and Humanities, while they have strong individual identities, are also involved in interdisciplinary studies. Thus students will find, for example, courses in the Department of English that approach literature from political perspectives, courses in the Department of History that rely on feminist perspectives, courses in the Department of Art History and Archaeology that study African cultures, and so on.

Further examples of the special opportunities available to students in this richly variegated college include an exceptional slide library in Art History and Archaeology, the English Department's computer-based writing laboratory, an AT&T Foreign Language Classroom, a junior-year-abroad program in Nice, France, a year-abroad program in Sheffield, England, and Honors programs in most departments. In addition, the education vistas open to students in Dance, Music, and Theatre have been enhanced enormously by the recent opening of the Clarice Smith Center for the Performing Arts, which now houses those three departments.

Recruitment

1120L Francis Scott Key Hall, 301-405-2096
www.ARHU.umd.edu/admissions
 Admissions Coordinator: J. Darius Greene

The College's Admissions Coordinator serves as a resource and contact person for prospective students interested in Arts and Humanities degrees and also serves as a liaison to the Office of Undergraduate Admissions.

Entrance Requirements

Students wishing to major in one of the creative or performing arts are encouraged to seek training in the skills associated with such an area prior to matriculation. Students applying for entrance to these programs may be required to audition, present slides, or submit a portfolio as a part of the admission requirements.

Graduation Requirements

The following College requirements apply only to students earning Bachelor of Arts degrees from the College of Arts and Humanities. These requirements are in addition to or in fulfillment of campus and departmental requirements. For information concerning the Bachelor of Music in the School of Music, students should consult a Music advisor.

Students who double major in ARHU and another college on campus **must** complete the College requirements in ARHU of foreign language to the intermediate level, and 45 hours of upper-level credit.

All Arts and Humanities freshmen (excluding students in College Park Scholars, Honors Humanities, or University Honors) must take UNIV 101, The Student in the University and Introduction to Computer Resources, during their first semester on campus.

Distribution

A minimum of 45 of the total of 120 semester hours must be upper-level work (i.e., courses numbered 300-499).

Foreign Language

Language proficiency may be demonstrated in one of several ways:

- Successful completion of level 4 in one language in high school. **Students must provide a high school transcript to verify exemption.**
- Successful completion of an intermediate-level college foreign language course designed by the department.
- Successful completion of a language placement examination in one of the campus language departments offering such examinations.

Students who have native proficiency in a language other than English should see an advisor in the ARHU Office of Student Affairs, or call 301-405-2108.

Changes in the foreign language requirement are under review. Students should consult the ARHU Office of Student Affairs for updated information.

Major Requirements

All students must complete a program of study consisting of a major (a field of concentration) and usually supporting courses as specified by one of the academic units of the College. No program of study shall require in excess of 60 semester hours. Students should consult the unit in which they will major for specific details; certain units have mandatory advising.

A major shall consist, in addition to the lower-division departmental prerequisites, of 24 to 40 hours, at least 12 of which must be in courses numbered 300 or 400 and at least 12 of which must be taken at the University of Maryland, College Park.

A major program usually requires a secondary field of concentration (supporting courses). The nature and number of these courses are determined by the major department.

No grade lower than C may be used to fulfill major or supporting course requirements. No course for the major or support module may be taken Pass-Fail.

Advising

Freshmen and new transfer students have advisors in the Arts and Humanities College Office of Student Affairs (301-405-2108) who assist them in the selection of courses. Students **must** see the departmental advisor for the major. All first-year students (both freshmen and transfers) and seniors who have completed 90-105 credits have mandatory advising in both the College and the department. For further information about advising, students should call the ARHU Office of Student Affairs, 301-405-2108.

54 College of Arts and Humanities

Degrees and Majors

The College of Arts and Humanities offers the degree of Bachelor of Arts in the following fields of study:

- American Studies
- Art
- Art History and Archeology
- Chinese Language and Literature
- Classics
 - Classical Humanities
 - Greek
 - Latin
 - Latin and Greek
- Communication
- Dance
- English Language and Literature
- French Language and Literature
- Germanic Studies
- History
- Italian Language and Literature
- Japanese Language and Literature
- Jewish Studies
- Linguistics
- Music
- Philosophy
- Romance Languages
- Russian Language and Culture
- Russian Area Studies
- Spanish and Portuguese Languages and Literatures
- Theatre
- Women's Studies

The College also offers the degree of Bachelor of Music; certificate programs in Women's Studies, East Asian Studies, and Latin American Studies; and a program in Comparative Literature.

Internships

Several departments within Arts and Humanities have well-established internship options. For more information on internships taken for academic credit, students should contact their departmental academic advisor. Typically students must be in good academic standing and in their junior or senior year to complete a for-credit internship. They usually complete an application and attach a current academic transcript, and the experience usually lasts for one semester. In addition to the site experience, students write an analysis of the experience in conjunction with a faculty member of a class. Internships in literacy and in the Maryland General Assembly are available through the English Department 301-405-3827. For assistance in locating an internship site, visit the Career Center at 3100 Hornbake Library, South Wing or do a search on the web site www.careercenter.umd.edu.

Certification of High School Teachers

A student who wishes certification as a high school teacher in a subject represented in this College must consult the College of Education in the second semester of the sophomore year. Application for admission to the Teacher Education program is made at the time that the first courses in Education are taken. Enrollment in the College of Education is limited.

Honors

Honors Programs

Most departments in the College of Arts and Humanities offer departmental Honors Programs (DHP). DHPs are upper-division programs that provide students with a transition from the two-year University Honors and College Park Scholars programs to individual academic units. Students enrolled in departmental Honors work independently with faculty members in subjects of special interest, develop and deepen their research skills, and in the process earn an even stronger degree. Students must have a cumulative grade point average of at least 3.0 to be admitted. For further information about individual Departmental Honors Programs and policies, consult with departmental advisors.

Honors Humanities

1103 Wicomico Hall, 301-405-6992
www.honorshumanities.umd.edu
Director: Dr. Tanya Jung

Entering freshmen participate by invitation in Honors Humanities, a two-year living/learning program. Honors Humanities is for academically talented students who have intellectual ambitions in the humanities and arts or a desire to develop their education on a liberal arts foundation. The program provides students with stimulating seminars, exciting academic friendships, a lively home base in Easton Hall, and opportunities to take advantage of the intellectual, cultural, and artistic riches of the region around Washington, D.C. Upon successful completion of the program, students earn a citation in Honors Humanities, and this citation is entered upon their university transcripts.

Phi Beta Kappa

Consult the description of Phi Beta Kappa in chapter 4.

College Park Scholars

CPS in the Arts: Professor Peter Beicken, Dr. David Solomon
CPS in American Cultures: Professor Sangeeta Ray
www.scholars.umd.edu

The College of Arts and Humanities co-sponsors two cross-disciplinary College Park Scholars programs in Arts and American Cultures. These two-year programs provide exciting living-learning environments in specially-equipped residence halls for incoming freshmen. Students with strong interests in these areas meet in weekly colloquia with faculty, in the Arts program with student teachers as well (usually alumni of the program), to pursue creative and intellectual endeavors. Field trips, invited speakers, and a yearly staged Spring Fair (Arts) stimulate creativity and the sense of togetherness while forming a community of learners and teachers. American Cultures focuses on the continent allowing students to think comparatively. Students present on various aspects of culture and history with a culminating festival in the Spring semester. The Scholars program gives students the opportunity to study with their peers while being in close contact with their faculty advisors and experiencing a small college environment that provides a special intellectual, creative and social home for 150 students (freshmen and sophomores) in each program.

Jiménez-Porter Writers' House

0111 Dorchester Hall, 301-405-0671
www.writershouse.umd.edu
Director: Johnna Schmidt

The Jiménez-Porter Writers' House is a two-year living and learning program open to students from all majors and across all four years of undergraduate study. Located in Dorchester Hall, the Writers' House creates a campus-wide literary center to study creative writing in its cross-cultural and multilingual dimensions. Participants live in a close community of students who share an interest in creating stories, poems, plays, and imaginative non-fiction. Students work with visiting writers, publish a literary magazine, attend special readings and colloquia, produce an annual literary festival, and receive notation upon successful completion of the program. Class sizes are small, and include one-on-one faculty advising sessions. Admission to the Writers' House is competitive, with only forty to fifty students living and writing together each year. Applications can be obtained by contacting the director, or by visiting www.writershouse.umd.edu. Final deadline for admission every year is March 1.

Research and Service Units

Academic Computing Services

1116 Francis Scott Key Hall, 301-405-2104
www.ARHU.umd.edu/technology
Director: Kathleen R. Cavanaugh

Academic Computing Services (ACS) supports the use of technology by faculty, staff, and students in the College of Arts and Humanities. ACS maintains a variety of laboratories and instructional facilities to support the needs of the College. These include computer-equipped classrooms such as the Language Technology Classroom and the English New Media Classroom as well as facilities, such as the lab in the St. Mary's Hall, designed for individual student use.

The Art Gallery

1202 Art-Sociology Building, 301-405-2763
www.artgallery.umd.edu
Director: Scott D. Habes

The Art Gallery presents a series of exhibitions each year of historic and contemporary art in a variety of media and subject matter. Opportunities for museum training and arts management experience are available to students through intern and work-study positions.

The Center for Studies in Nineteenth-Century Music

2101 Skinner Building, 301-405-7780
Director: H. Robert Cohen
Research Coordinator: Richard Kitson

The Center for Studies in Nineteenth-Century Music promotes research focusing on nineteenth-century music and musical life. The center's programs are designed to facilitate the study, collection, editing, indexing, and publication of documentary source materials.

The Center for Renaissance and Baroque Studies

0139 Taliaferro Hall, 301-405-6830
www.crbs.umd.edu
Founding Director: S. Schoenbaum (1927-96)
Director: Adele Seeff
Associate Director: Karen Nelson

The Center for Renaissance and Baroque Studies promotes teaching and research in the Renaissance and Baroque Periods in all disciplines of the arts and humanities. The Center sponsors a vast array of programs, including annual interdisciplinary symposia, special lectures and performances, conferences, summer institutes, and a volume series of symposia proceedings published by the University of Delaware Press in conjunction with Associated University Presses. As part of its mission to support undergraduate education, the Center offers a citation in Renaissance studies and coordinates a series of interdisciplinary arts and humanities courses. Through its CAST program (Center Alliance for School Teachers), the Center provides professional development to secondary school arts and humanities teachers throughout the state of Maryland and an after-school drama program for at-risk high school students. The planning committee for Attending to Early Modern Women—one of the Center's standing committees—organizes and coordinates an international symposium on the university's campus every three years.

David C. Driskell Center for the Study of the African Diaspora

2114 Tawes Fine Arts Building ZIP: 1220
301-314-2615
driskellcenter@umail.umd.edu
www.driskellcenter.umd.edu
Executive Director: Robert E. Steele

Established in 2001 through the generous gifts of David C. Driskell, Distinguished University Professor Emeritus of Art, and a community of artists, scholars, and friends associated with the University of Maryland, the David C. Driskell Center for the Study of the African Diaspora is a venue for the exploration of the presence of Africa and the African diaspora in modern culture. Through performances and exhibitions, conferences and symposia, grant and fellowship competitions, and outreach activities, the Driskell Center seeks to nurture research and creativity of the highest caliber, provide training for scholars and students on issues and methodologies in the study of the African diaspora, and encourage the growth of future generations of artists and researchers who can bring new insights to the phenomenon of the African diaspora and its influence.

The Driskell Center is a unit of the College of Arts and Humanities. It assumes several programs formerly administered by the Committee on Africa and the Americas, a joint venture between Arts and Humanities and the College of Behavioral and Social Sciences.

Consortium on Race, Gender, and Ethnicity (CRGE)

2103 Tawes-Fine Arts Bldg, 301-405-2931
www.crge.umd.edu
Director: Bonnie Thornton Dill
Assistant Director: Amy E. McLaughlin

The Consortium is an association of academic units and individual faculty on the University of Maryland Campus whose mission is to promote, advance and conduct, research, scholarship and faculty development that examines the intersections of race, gender and ethnicity with other dimensions of difference. The Consortium also offers programs and opportunities aimed at student development including fellowships and colloquia.

Language House

0107 St. Mary's Hall, 301-405-6996
www.umd.edu/langhouse
Coordinator: Phoenix Liu

The Language House is a campus residence for students wishing to immerse themselves in the study of a foreign language and culture. A total of over 100 students of Chinese, French, German, Hebrew, Italian, Japanese, Russian, and Spanish share 19 apartments. A live-in graduate mentor leads each language cluster. The goal of language immersion is achieved through activities organized by the students and mentors, a computer-based Language Learning Center, an audio-visual room, an international cafe, and foreign television programs received via satellite.

Language Media Services

1204 Jiménez Hall, 301-405-6927
Facsimile: 301-314-9752
Email: jb434@umail.umd.edu
cw188@umail.umd.edu
www.umd.edu/lms
Janel Brennan Tillman, Coordinator of Foreign Language Instructional Technology

Serving the technology needs of the foreign language programs in the College of Arts and Humanities, Language Media Services provides for the audiovisual and computing needs of students, faculty and staff. The LMS collection consists of instructional materials as well as audio and video equipment. The unit supports a computing facility and audio lab, and also provides workshops and training for faculty in regards to the integration of technology into their instruction.

FOLA

1109 Jiménez Hall, 301-405-4046
www.umd.edu/foia
Coordinator: Naime Yaramanoglu

The FOLA (Foreign Language) Program enables qualified students with high motivation to acquire a speaking knowledge of a number of foreign languages not offered in regular campus programs. While instruction is basically self-directed, students meet regularly with a native-speaking tutor for practice sessions to reinforce what has already been covered through the individual use of books and audio tapes. Final examinations are administered by outside examiners who are specialists in their fields.

Course Code: ARHU

COLLEGE OF BEHAVIORAL AND SOCIAL SCIENCES (BSOS)

2148 Tydings Hall, 301-405-1697
bsosque@bsos.umd.edu (for BSOS advising questions)
www.bsos.umd.edu/deans.html
www.bsos/umd.edu/advising_homepage.html

Professor and Dean: Edward B. Montgomery
Senior Associate Dean: Robert Schwab
Assistant Dean: Katherine Pedro Beardsley
Assistant Dean: Cynthia Hale
BSOS Advising Center: 301-405-1697

The College of Behavioral and Social Sciences is comprised of a diverse group of disciplines and fields of study all of which emphasize a broad liberal arts education as the foundation for understanding the environmental, social, and cultural forces that shape our world. At the heart of the behavioral and social sciences is the attempt to understand human beings, both individually and in groups. Disciplines in the behavioral and social sciences use approaches that range from the scientific to the philosophical, from the experimental to the theoretical. Integral to all the disciplines, however, is the development and application of problem solving skills, which in combination with other academic skills, enable students to think analytically and to communicate clearly and persuasively. Students interested in human behavior and in solving human and social problems will find many exciting opportunities through the programs and courses offered by the College of Behavioral and Social Sciences.

The College is composed of the following departments, each offering a major program that leads to the Bachelor of Arts or the Bachelor of Science degree, as appropriate:

56 College of Behavioral and Social Sciences

Department of African American Studies
Department of Anthropology
Department of Criminology and Criminal Justice
Department of Economics
Department of Geography
Department of Government and Politics
Department of Hearing and Speech Sciences
Department of Psychology
Department of Sociology

In addition, the College is a major contributor to the Environmental Science and Policy Program, and sponsors several of its areas of concentration.

*The Department of African American Studies also offers an undergraduate certificate requiring 21 semester hours of course work (see Undergraduate Certificate Programs in chapter 7).

Advising

The BSOS Advising Center coordinates advising and maintains student records for BSOS students. Advisors are available to provide information concerning University requirements and regulations, transfer credit evaluations, and other general information about the University by appointments taken on a walk-in basis from 9 a.m. to 5 p.m. daily. Undergraduate advisors for each undergraduate major are located in the department offices. These advisors are available to assist students in selecting courses and educational experiences in their major area of study consistent with major requirements and students' educational goals.

Graduation Requirements

Each student must complete a minimum of 120 hours of credit with at least a 2.0 cumulative grade point average. Courses must include the credits required in the University's general education requirements (CORE) and the specific major and supporting course and grade requirements of the programs in the academic departments offering bachelor's degrees.

Students in BSOS must complete fundamental studies Math and English by 56 credits.

Students must complete 15 upper-level credits and 12 major credits in the student's final 30 credits.

All students are urged to speak with an academic advisor in their major and an advisor in their College Advising Office at least two semesters before graduation to review their academic progress and discuss final graduation requirements.

Honors

Undergraduate honors are offered to graduating students in the departments of African American Studies, Anthropology, Criminology and Criminal Justice, Economics, Geography, Government and Politics, Psychology, and Sociology.

Dean's Academic Scholar. To be named a Dean's Academic Scholar is the highest academic award that a BSOS student can earn in the College. Dean's Scholars are those graduating seniors who have completed 60 credits at the University of Maryland, College Park and have maintained a minimum cumulative grade point average of 3.8. A student who has been found responsible of a violation of academic integrity is not eligible.

Dean's List. Any student who has passed at least 12 hours of academic work in the preceding semester, without failure of any course and with an overall average grade of at least 3.5 will be placed on the Dean's List. The Distinguished Dean's list consists of students who have completed successfully a minimum of 12 credit hours in a semester with a 4.0.

Student Organizations and Honor Societies

Students who excel in their academic discipline may be selected for membership in an honorary society. Honoraries for which students in BSOS are chosen include:

Alpha Kappa Delta—Sociology
Alpha Phi Sigma—Criminal Justice
Gamma Theta Upsilon—Geography
Lambda Epsilon Gamma—Law
Omega Delta Epsilon—Economics
Pi Sigma Alpha—Political Sciences
Psi Chi—Psychology
Pi Gamma Mu—Social Sciences

Students who major in the Behavioral and Social Sciences have a wide range of interests. The following is a list of student organizations in the disciplines and fields of the Behavioral and Social Sciences:

Anthropology Student Organization
Conservation Club
Criminal Justice Student Association
Economics Club
Geography Club
Government and Politics Club
Minority Pre-Professional Psychology Society
National Student Speech-Language and Hearing Association (NSSLHA), Maryland Chapter
Pre-Medical Society (Pre-Med/Psychology Majors)
The Forum (Sociology)
Thurgood Marshall Pre-Law Society

For more information about these student organizations or starting a new student group, please contact the Office of Campus Activities, Adele H. Stamp Student Union, 301-314-7174.

Field Experiences/Pre-Professional and Professional Training

Pre-professional training and professional opportunities in the behavioral and social sciences are available in many fields. The internship programs offered by many departments in the College provide students with practical experience working in governmental agencies, nonprofit organizations, corporations, and the specialized research centers and laboratories of the College. To earn credit for a BSOS departmental internship, a minimum cumulative grade point average (usually a 3.0) is required.

Undergraduate Research Opportunities

Undergraduate research internships allow qualified undergraduate students to work with research laboratory directors and faculty in departments and specialized research centers, thus giving the student a chance for a unique experience in the design and conduct of research and scholarship. Students are advised to consult with their department advisors on research opportunities available in the major.

Research and Service Units

The College of Behavioral and Social Sciences sponsors several special purpose, college-wide research centers. These centers include **The Public Safety Training and Technology Assistance Agency** and the **Center for Substance Abuse Research**. These interdisciplinary centers often offer internships and a selected number of undergraduate research assistant opportunities for interested students. These research experiences offer excellent preparation for future graduate study and/or job opportunities in the private and public sectors. In addition, the college offers computer services through its Office of Academic Computer Services.

Center for Substance Abuse Research (CESAR)

Director: Eric D. Wish, 301-403-8329

Established in 1990, CESAR is a research unit sponsored by the College of Behavioral and Social Sciences. CESAR staff gather, analyze, and disseminate timely information on issues of substance abuse and monitor alcohol- and drug-use indicators throughout Maryland. CESAR aids state and local governments in responding to the problem of substance abuse by providing the above-stated information, as well as technical assistance and research. Faculty members from across campus are involved with CESAR-based research, creating a center in which substance-abuse issues are analyzed from multidisciplinary perspectives. Students obtain advanced technical training and hands-on experience through their involvement in original surveys and research.

Public Safety, Training and Technology Assistance (PSTTP)

Director: Thomas H. Carr, 301-489-1700

Established in 1994, the Public Safety, Training and Technology Assistance Program (PSTTP) (formerly the Washington/Baltimore HIDTA) is co-sponsored by the College of Behavioral and Social Sciences and President Bush's Office of National Drug Control Policy. This program is funded by Congress to help coordinate and fund the fight against drug-related crime and to treat drug-addicted criminal offenders. HIDTA efforts integrate prevention and law enforcement at the community level to reduce the involvement of high-risk youth in drug trafficking careers and criminal behavior. HIDTA also works with private industry and government to form partnerships geared toward

the development of commercial software for use by law enforcement, criminal justice, treatment and regulatory agencies. The Washington/Baltimore HIDTA employs a multi-disciplinary approach that incorporates law enforcement, treatment/criminal justice and prevention through a regional strategy that includes all these disciplines. Faculty members from across campus are involved with HIDTA-based research, and students obtain advanced technical training and hands-on experience through their involvement in data collection, original surveys, geo-mapping and research.

Office of Academic Computer Services (OACS)

0221 LeFrak Hall, 301-405-1670

The College believes strongly that the study of behavioral and social sciences should incorporate both quantitative and computational skills. Consequently, curricula in most departments require some course work in statistics, quantitative research methods, and information technology. The BSOS Office of Academic Computer Services provides undergraduate students in the College with both facilities and staff assistance to satisfy a broad range of computer-related needs. The OACS operates five computer classrooms and a specialized graphics lab that offer a wide variety of popular software, color and black-and-white printing, and both text and graphics scanning. Undergraduate students are also encouraged to take advantage of OACS's learning resources including free computer and statistics training courses, help documentation, a library of computer-related texts, and free access to research data.

THE ROBERT H. SMITH SCHOOL OF BUSINESS (BMGT)

Office of Undergraduate Studies: 1570 Van Munching Hall, 301-405-2286
www.rhsmith.umd.edu

Professor and Dean: Howard Frank
 Professor and Senior Associate Dean: Assad
 Associate Dean for Professional Programs and Services: Koerwer
 Professor and Director of Doctoral Program: Gordon
 Associate Dean and Director for Undergraduate Programs: Cleveland
 Associate Directors for Undergraduate Programs: Horick, McAllister
 Associate Director for Undergraduate Programs at Shady Grove: Glasgow
 Academic Advisors for Undergraduate Programs: Armstrong, Clothier, Hamilton, Jones, Salinas, Smit

The Robert H. Smith School of Business recognizes the importance of education in business and management to economic, social, and professional development through profit and nonprofit organizations at the local, regional, national, and international levels. The faculty are scholars, teachers, and professional leaders with a commitment to superior education in business and management, specializing in accounting, finance, information systems, operations management, management and organization, marketing, logistics, transportation and supply chain management, and business and public policy. The Smith School of Business is accredited by The Association to Advance Collegiate School of Business (AACSB), the official national accrediting organization for business schools.

Degrees

The university confers the following degrees: Bachelor of Science (B.S.), Master of Business Administration (M.B.A.), Master of Science (M.S.), and Doctor of Philosophy (Ph.D.). Information concerning admission to the M.B.A. or M.S. program is available at www.rhsmith.umd.edu.

Undergraduate Program

The undergraduate program recognizes the need for professional education in business and management based on a foundation in the liberal arts. In addition, the program's internationally integrated curriculum prepares students to be effective and responsible managers in today's dynamic business environment.

A student in business and management selects a major in one of several curricula: (1) Accounting; (2) Information Systems; Specialization Business; (3) Finance; (4) General Business; (5) International Business; (6) Operations Management; (7) Marketing; (8) Logistics, Transportation, and Supply Chain Management.

Honors Program

The Smith School Honors program offers students with superior academic achievements special opportunities and resources, including the opportunity to participate in cutting-edge research on business issues, and to graduate with honors. Students in the honors program take their upper-level BMGT core courses in small, seminar-style honors sections, which allow in-depth exploration of business topics in marketing, finance, management and organization, business law, and policy and strategy. The Smith School Honors Program provides both a non-thesis and a thesis option—in which students work on an original research project under the supervision of a Smith School faculty member. Admission to the Smith School Honors Program is competitive. Students are selected on the basis of the following requirements:

- Minimum 3.5 cumulative grade point average
- Minimum 45 credit hours earned
- Completion of all BMGT pre-requisite courses by the end of Spring semester:
 - Accounting I and II – BMGT 220 and 221
 - Statistics – BMGT 230 (or 231)
 - Calculus – MATH 220 or 140
 - Micro- and Macro Economics – ECON 200 and 201

The application to the BMGT Honors program includes a personal essay and two letters of recommendation from faculty. The BMGT Honors application can be downloaded from the Smith School website: www.rhsmith.umd.edu/undergrad.

Admission to the Smith School Honors Program takes place once a year in the Spring semester. More details are available at www.rhsmith.umd.edu/undergrad/businesshonors.

Advising

General advising for students admitted to the Smith School of Business is available Monday through Friday in the Office of Undergraduate Programs, 1570 Van Munching Hall, 301-405-2286. It is recommended that students visit this office each semester to ensure that they are informed about current requirements and procedures.

Transfer students entering the university can be advised during spring, summer, and fall transfer orientation programs. Contact the Orientation Office for further information, 301-314-8217.

Admission to Smith School of Business

See chapter 1 for general LEP admissions policies.

Current policies affect students entering the University System of Maryland or the Maryland Community College system in Fall 2005 and thereafter. Students enrolled at the University System of Maryland or in the Maryland Community College system prior to Fall 2005 will continue to be admitted under the admissions criteria in effect for the Spring 2001 through Spring 2005 terms. Grandfathered admission will end in Fall 2007, when all students must meet the current admission standards. Grandfathered students, however, will be given the option of entering under the new requirements prior to Fall 2007.

Freshman Admission

Admission to the BMGT degree programs is competitive. A limited number of freshmen who demonstrate outstanding talent will be admitted directly to their BMGT major of choice (e.g. Accounting, Finance, etc.). Admission will be on a space available basis. All students are urged to apply early. All students admitted directly to BMGT as freshmen must demonstrate satisfactory progress (2.00 cumulative GPA or better) plus completion of Gateway courses (BMGT 220, BMGT 230, ECON 200 or 201, and MATH 220 or 140—each with a “C” or better) in the semester they reach 45 credits (excluding AP and ESL), at which time they will be reviewed in order to continue in the BMGT major.

Students not directly admitted to the Smith School of Business as freshman can be admitted to the Division of Letters & Sciences, with some of these students enrolling in the Markets and Society program. These students can apply for admission to Business by the semester in which 60 credits are completed. (See Transfer Admission below)

58 The Robert H. Smith School of Business

Transfer Admission for Students from On or Off Campus

- All students applying for admission to BMGT as transfer students, whether internal transfers already enrolled at UMCP or external transfer students entering the university for the first time, will be subject to competitive admission for a limited number of spaces in the BMGT program at each program location.
- To be considered for admission, applicants must complete the following requirements:
 - Minimum 3.0 cumulative GPA (preferred, may vary based upon the applicant pool)
 - Minimum junior standing – 60 credits earned
 - Completion of 50% of lower-level university CORE requirements (Note: ECON 200 and 201 satisfy lower-level SB CORE requirements and MATH 220 or 140 satisfies lower-level MS CORE requirements)
 - Completion of the following Gateway courses, all with “C” or better:
 - BMGT 220 and 221: Accounting
 - ECON 220 and 201: Micro and Macro Economics
 - ENGL 101
 - MATH 220 or 140: Calculus
 - BMGT 230 or BMGT 231 or equivalent: Statistics
- Co-curricular involvement, leadership experience and honors and awards will also be considered in the admission decision. Students are strongly encouraged to submit with their applications a resume and letter detailing their accomplishments and experience.
- Application Deadlines for Transfer Students:** Complete applications and all supporting documents must be received no later than:
 - Fall semester: August 1st
 - Spring semester: January 10th

Freshmen who begin study in another major at College Park who would have met the direct BMGT admission standards from high school have until the last day of instruction in the first semester of their freshmen year at College Park to change their major to BMGT.

Appeals to this Policy

Appeals to this policy may be filed with the Office of Undergraduate Admissions, on the ground floor Mitchell Building. Such appeals will require documentation of unusual, extenuating, or special circumstances.

Statement of Policy on Transfer of Credit from Community Colleges

It is the practice of the Smith School of Business to consider for transfer from a regionally accredited community college only the following courses in business administration: an introductory business course, business statistics, introduction to computing (equivalent to BMGT 201), or elementary accounting. Thus, it is anticipated that students transferring from another regionally accredited institution will have devoted the major share of their academic effort below the junior year to the completion of basic requirements in the liberal arts. A total of 60 semester hours from a community college may be applied toward a degree from the Smith School of Business.

Other Institutions

The Smith School of Business normally accepts transfer credits from regionally accredited four-year institutions. Junior- and senior-level business courses are accepted from colleges accredited by the Association to Advance Collegiate Schools of Business (AACSB). Junior- and senior- level business courses from other than AACSB-accredited schools are evaluated on a course-by-course basis to determine transferability.

The Smith School of Business requires that at least 50 percent of the business and management credit hours required for a business degree be earned at the University of Maryland, College Park.

Summary of Bachelor of Science Degree Requirements (all curricula)

At least 45 hours of the 120 semester hours of academic work required for graduation must be in business and management subjects. A minimum of 58 hours of the required 120 hours must be in 300- or 400-level courses. In addition to the requirement of an overall cumulative grade point average of 2.0 (C average) in all university course work. Effective Fall 1989, all business majors must earn a 2.0 or better in all required courses, including Economics, Mathematics, and Communication. Electives outside the curricula of the School may be taken in any department of the university, if the student has the necessary prerequisites.

Note: Curriculum under review. Please see www.rhsmith.umd.edu/undergrad for the most current information.

Freshman-Sophomore School Requirements	Credit Hours
MATH 220* or 140** Elementary Calculus I or Calculus I	3 or 4
BMGT 220 and 221 Principles of Accounting I and II	6
BMGT 230 or 231** Business Statistics	3
ECON 200 and 201 Principles of Micro + Macro Economics	8
COMM 100, 107, or 200 Foundations of Speech Comm., Speech Com., or Critical Thinking and Speaking	3
Total	23-28

** MATH 140 and 141 are required for Information Systems - Business
*** BMGT 231 is required for Information Systems - Business

Junior-Senior School Requirements	Credit Hours
BMGT 301 Introduction to Information Systems	3
BMGT 340 Business Finance	3
BMGT 350 Marketing Principles and Organization	3
BMGT 364 Management and Organizational Theory	3
BMGT 367 Career Search Strategies in Business	1
BMGT 380 Business Law	3
BMGT 495 or 495H Business Policies	3
Economics (see below)	3-6
Total	22-25

Economics Requirements

3-6 credits of approved upper-level economics courses are required by the Smith School of Business. The specific requirements for each major are listed on the following pages.

Major Requirements

Under each major, 18-24 credits are required. The specific requirements for each major are listed on the following pages.

A Typical Program for the Freshman and Sophomore Years

Freshman Year	Credit Hours
CORE and/or electives	9
ENGL 101 or equivalent	3
MATH (depending on placement)*	3
First semester total	15
CORE and/or electives	9
COMM 100, 107, or 200	3
MATH or BMGT 230/231*	3
Second semester total	15
Sophomore Year	
CORE and/or electives	6
BMGT 220 (Prereq. Sophomore Standing)	3
ECON 200	4
MATH or BMGT 230/231*	3
Third semester total	16
CORE and/or electives	6
ECON 201	4
BMGT 221 (Prereq. BMGT 220)	3
BMGT 230 (Prereq. MATH 220*) or 231* (Prereq. MATH 141) or elective	3
Fourth semester total	16

* See Freshman-Sophomore School requirements for appropriate math and statistics courses.

Curricula

Accounting

Chair: J. Peters
 Professors: Gordon, Kim, M. Loeb, S. Loeb
 Tyser Teaching Fellows: Bulmash, Finch, Rymer

Accounting, in a limited sense, is the analysis, classification, and recording of financial events and the reporting of the results of such events for an organization. In a broader sense, accounting consists of all financial systems for planning, controlling, and appraising performance of an organization. Accounting includes among its many facets: financial planning, budgeting, accounting systems, financial management controls, financial analysis of performance, financial reporting, internal and external auditing, and taxation. The accounting curriculum provides an educational foundation for careers in public accounting, management, whether in private business organizations, government or nonprofit agencies, or consulting. Two tracks are provided: The Public Accounting Track leading to the CPA (Certified Public Accounting) and the Management Accounting/Consulting Track. **Please note:** Currently, only the Public Accounting track is available.

Major Requirements: All Accounting Majors

BMGT 310 Intermediate Accounting I3 credits
 BMGT 311 Intermediate Accounting II3 credits
 BMGT 321 Managerial Accounting3 credits
 BMGT 326 Accounting Systems3 credits

Public Accounting Track Requirements:

BMGT 323* Taxation of Individuals3 credits
 BMGT 422* Auditing Theory & Practice3 credits
 Plus Two of the following:
 BMGT 411* (Ethics), 417, 424, 427, 4286 credits
Note: * Required for CPA in Maryland

Management Accounting/Consulting Track Requirements:

BMGT 426 Advanced Managerial Acct.3 credits
 Plus three of the following:9 credits
 BMGT 305, 323, 332, 385, 402, 403, 411, 417, 424,
 428, 430, 434, 440, 446
Total24

One of the following:3 credits
 ECON 305, 306, 330, 340

Total3 credits

The basic educational requirements of the Maryland State Board of Public Accountancy to sit for the CPA examination are a baccalaureate or higher degree with a major in Accounting or with a non-accounting degree supplemented by course work the Board determines to be substantially the equivalent of an Accounting major. Students planning to take the CPA examination for certification and licensing outside Maryland should determine the educational requirements for that state and arrange their program accordingly.

Since June 30, 1999, all applicants who desire to take the CPA examination in Maryland have been required to have completed 150 semester hours of college work as well as other specified requirements.

Decision and Information Technologies

Chair: G. Anandalingam
 Professors: Anandalingam, Agarwal, Assad, Ball, Bodin (Emeritus), Frank, Fu, Gass (Emeritus), Golden, Lucas, Raschid, Riley
 Associate Professors: Alt, Chen, Faraj, Raghavan
 Assistant Professors: Dellarocas, Druehl, Elmaghraby, Gopal, Gosain, Jank, Karaesmen, Mishra, Mithas, Raghavan, Shmueli, Smueli, Stewart, Souza, Viswanathan, Zantek
 Visiting Professor: Prasad
 Tyser Teaching Fellows: Ibrahim, Lete, Ruhi, Studer-Ellis

The Department of Decision and Information Technologies offers two majors: Information Systems - Specialization: Business, and Operations Management.

Information Systems - Specialization: Business

The Business Area of Concentration in the Information Systems (IS) program prepares students to be effective users and managers of information technologies and systems in the current environment of the technology-enabled business firm. The IS major focuses on the data processing skills, the analytical skills, and the managerial plus organizational knowledge required to design and manage information systems and applications based on business and customer requirements. The major's core emphasizes the concepts of systems analysis and design and database management systems. In addition to a broad grounding in the key functional areas of marketing, operations, accounting, and finance, this major develops in-depth knowledge of information processing technology, information systems implementation, project management, and management science and statistics.

BMGT 302 Business Computer Application Programming3 credits
 BMGT 305 Survey of Business Information Systems & Technology 3 credits
 BMGT 402 Database Systems3 credits
 BMGT 403 Systems Analysis and Design3 credits
 BMGT 407 Information Systems Projects3 credits
 BMGT 485 Project Management3 credits

One of the following:3 credits
 BMGT 430 Linear Statistical Models in Business
 BMGT 434 Introduction to Optimization
 BMGT 486 Total Quality Management

One of the following:3 credits
 BMGT 405 Business Telecommunications
 BMGT 406 Electronic Commerce Application Development

Total24 credits

One of the following:
 ECON 305, 306, 430, or 440 3 credits
Total3 credits

Note: Curriculum under review. Please see www.rhsmith.umd.edu/undergrad for the most current information.

Operations Management

Operations Management involves the design and management of an organization's systems and processes focusing on the creation and delivery of products and services. This includes such functions as capacity planning, inventory management, logistics management, production planning and control, resource allocation and total quality. Career opportunities exist in consulting, manufacturing, retailing, service organizations and government.

Students pursuing the Operations Management major must complete MATH 220 or MATH 140 and BMGT 230 or 231 prior to junior standing; and those interested in graduate work in this field are strongly advised to complete MATH 141, MATH 240 and 241 as well.

The course requirements for the junior-senior curriculum concentration in Operations Management are as follows:

	Credit Hours
BMGT 332 Operations Research for Management Decisions	3
BMGT 385 Operations Management	3
BMGT 485 Project Management	3

One of the following courses (check prerequisites):3
 BMGT 430 Linear Statistical Models in Business
 BMGT 434 Introduction to Optimization
 BMGT 435 Business Process Simulation

Two of the following courses (check prerequisites):6
 BMGT 430 Linear Statistical Models in Business
 BMGT 434 Introduction to Optimization
 BMGT 435 Business Process Simulation
 BMGT 372 Introduction to Logistics and Supply Chain Management

BMGT 403 Systems Analysis and Design
 BMGT 486 Total Quality Management or
 BMGT 487 Six Sigma Innovation
 BMGT 490H The Total Quality Practicum
 (Open only to QUEST students)

Total18 credits

One of the following:
 ECON 305, 306, 330, or 3403 credits

Total3 credits

60 The Robert H. Smith School of Business

Finance

Chair: Senbet
 Professors: Bakski, Madan, Maksimovic, Senbet, Unal
 Associate Professors: Phillips, Prabhala, Triantis, Wermers
 Assistant Professors: Avramov, Chen, Cichello, Heston, Hoberg, Hvidjkaer, Kiss, Loewenstein, Marquez, Vandeweghe, White, Willard
 Visiting Professors: Falato, Lamdin

Finance encompasses:

- (1) Corporate finance: The financial management of corporations
- (2) Investments: The management of securities and portfolios
- (3) Financial institutions and markets: The management of financial institutions and the study of their role in the economy

The Finance curriculum is designed to familiarize the student with the institutions, theory, and practice involved in the allocation of financial resources within the private sector. It provides an educational foundation for careers involving corporate financial analysis and management, investment analysis and portfolio management, investment banking, risk management, commercial banking, and international finance; it also provides a foundation for graduate study in business administration, economics, and law.

Course requirements for the junior-senior curriculum concentration in Finance are as follows:

	Credit Hours
Both of the following courses:	6
BMGT 343 Investments	
BMGT 440 Advanced Financial Management	
Three of the following courses:	9
BMGT 443 Applied Equity Analysis and Portfolio Management	
BMGT 444 Futures and Options Contracts	
BMGT 445 Banking and Financial Institutions	
BMGT 446 International Finance	
BMGT 447 Internship and Research in Finance	
BMGT 498 Special Topics in Business and Management (Finance)	
One of the following courses:	3
BMGT 310 Intermediate Accounting	
BMGT 332 Operations Research for Management Decisions	
BMGT 430 Linear Statistical Models in Business	
BMGT 434 Introduction to Optimization	
Total	18
ECON 330 or ECON 431	3
One of the following:	
ECON 305, 306, 340, 402, or 450.....	3
Total	6

Marketing

Chair: Rust
 Professors: Greer (Emeritus), Ratchford, Rust
 Associate Professors: Biehal, Jain, Kannan, Krapfel, Nickels (Emeritus), Ratner, Srivastava, Wagner
 Assistant Professors: Ferraro, Foutz, Hamilton, Moe

The goal of marketing is to satisfy all the stakeholders of the firm—employees, dealers, stockholders, and customers—by seeing that quality goods and services are developed and provided at fair prices and in a way that benefits the community and society. World-class competition has forced businesses to develop marketing programs that are as good as the best. This means getting closer to the customer, joining other organizations to create value for the consumer, and designing integrated distribution and communication programs that provide a seamless flow from producers to consumers. Pricing, communication/promotion, product/service, and distribution activities inherent in the development of marketing programs are applicable to non-profit organizations, business-to-business organizations, and firms that sell to ultimate consumers.

Many types of careers are available to the marketing major. These include, but are not limited to: sales, advertising, retailing, product/service management, and marketing research. Because of the many different employment opportunities in marketing, many marketing electives are offered along with three core courses required of all marketing majors—consumer analysis, marketing research, and marketing strategy.

Course requirements for the junior-senior curriculum concentration in Marketing are as follows:

	Credit Hours
BMGT 451 Consumer Analysis	3
BMGT 452 Marketing Research Methods	3
BMGT 457 Marketing Policies and Strategies	3
Three of the following courses:	9
BMGT 351 Direct Marketing	
BMGT 353 Retail Management	
BMGT 357 Retailing and Marketing Internship (3 credits only)	
BMGT 372 Introduction to Logistics and Supply Chain Management	
BMGT 450 Integrated Marketing Communications	
BMGT 453 Industrial Marketing	
BMGT 454 International Marketing	
BMGT 455 Sales Management	
BMGT 484 Electronic Marketing	
Total	18
One of the following:	
ECON 305, 306, 330 or ECON 340	3
One additional ECON from the following:	
ECON 305, 306, 311, 315, 316, 317, 330, 340, 361, 370	
374, 375, 380 or any 400-level ECON	3
Total	6

Logistics, Business, and Public Policy

Chair: Windle
 Professors: Corsi, Dresner, Grimm, Leete, Morici, Preston†, Windle
 Associate Professor: Evers, Newberg
 Assistant Professors: Chung, Gillyard, Hutchens, Sampson, Somaya
 Tyser Teaching Fellows: Dewitt, Olson, Shaffer, Turner
 Visiting Professors: McClenahan, Miller, Olson
 †Distinguished Scholar-Teacher

Logistics, Transportation, and Supply Chain Management

The supply chain encompasses all organizations involved in production of a good or service and its ultimate delivery to the end customer. Supply chain managers oversee many varied but inter-related processes including the flow of materials, information, and transactions (to name a few). Logistics deals primarily with the materials flow component of the supply chain, and logistics managers are responsible for fulfilling customer orders while simultaneously controlling distribution costs.

While transportation is the heart of logistics; inventory control, warehousing, order processing, materials handling, packaging, and customer service are important logistics activities. These logistics activities comprise up to 30 percent of total costs for many businesses. The cost of freight transportation alone is about 8 percent of the nation's annual domestic product.

Course requirements for the junior-senior curriculum concentration in Logistics, Transportation, and Supply Chain Management are as follows:

BMGT 370 Introduction to Transportation in Supply Chain Management	3
BMGT 372 Introduction to Logistics and Supply Chain Management	3
BMGT 476 Applied Computer Models in Supply Chain Management	3
Two of the following courses	6
BMGT 373 Logistics, Transportation, and Supply Chain Management Internship	
BMGT 470 Advanced Transportation Management	
BMGT 472 Advanced Logistics Operations	
BMGT 475 Advanced Supply Chain Management Strategy and Technologies	
BMGT 477 International Supply Chain Management	
One of the following courses.....	3
BMGT 305 Survey of Business Information Systems and Technology	
BMGT 332 Operations Research for Management Decisions	
BMGT 385 Operations Management	
BMGT 482 Business and Government	
BMGT 484 Electronic Marketing	
GEOG 373 Geographic Information Systems	
GEOG 430 Location Theory and Spatial Analysis or one of the following not selected above from BMGT 373, 470, 472, 475 or 477	
One of the following:	
ECON 305, 306, 330 or ECON 340	3
One additional ECON from the following:	
ECON 305, 306, 311, 315, 316, 317, 330, 340, 361, 370	
374, 375, 380, 422, 423, and 425, or any 400-level ECON	
except 422, 423, and 425	3
Total	6

General Business

General Business is designed for those who desire a broad course of study in business and management. This degree is appropriate, for example, for those who plan to enter small-business management or entrepreneurship where general knowledge of the various fields of study may be preferred to a more specialized curriculum concentration.

Course requirements for the junior-senior curriculum concentration in General Business and Management are as follows:

	Credit Hours
Accounting/Finance	
One of the following courses:	3
BMGT 321 Managerial Accounting	
BMGT 440 Advanced Financial Management	
Decision & Information Sciences	
One of the following courses:	3
BMGT 332 Operations Research for Management Decisions	
BMGT 305 Survey of Business Information Systems and Technology	
Marketing	
One of the following courses:	3
BMGT 353 Retail Management	
BMGT 450 Integrated Marketing Communications	
International Business and Public Policy	
One of the following courses:	3
BMGT 392-Introduction to International Business	
BMGT 482 Business and Government	
BMGT 496 Business Ethics and Society	
Management & Organization	
One of the following courses:	3
BMGT 360 Human Resource Management	
BMGT 461 Entrepreneurship	
Supply Chain Management	
One of the following courses:	3
BMGT 372 Introduction to Logistics and Supply Chain Management	
BMGT 385 Operations Management	
Total	18
Two of the following: ECON 305, 306, 330, or 340	6
Total	6

Note: Curriculum under review. Please see www.rhsmith.umd.edu/undergrad for the most current information.

International Business

International Business responds to the global interest in international economic systems and their multicultural characteristics. This degree combines the college-required courses with International Business courses and provides students the opportunity to apply a specified upper level foreign language course toward this specialization's requirements. It is strongly recommended that this program be declared in combination with another major in or outside of business in order to assure that graduates will have specialized career focus.

Course requirements for the junior-senior curriculum concentration in General Business and Management, International Business option, are:

	Credit Hours
BMGT 392 Introduction to International Business	3
BMGT 454 International Marketing	3
BMGT 477 International Supply Chain Management	3
BMGT 446 International Finance.....	3
BMGT 463 Cross-cultural Challenges in Business	3
BMGT 466 Global Business Strategy	3
Total	18
ECON 340 International Economics	3
One of the following:	
ECON 305, 306, 315, 316, 330, 380 or an agreed upon foreign language credits which includes CHIN 412, FREN 406, GERM 412, ITAL 406, JAPN 404, RUSS 407, SPAN 415	3
Total	6

Quest Program

The University of Maryland's Quality Enhancement Systems and Teams Program (QUEST) program is a collaborative effort between the Robert H. Smith School of Business and the A. James Clark School of Engineering. QUEST graduates enter the work force with invaluable skills, excelling in teamwork, customer value management, process and product design, project management and customer satisfaction.

The QUEST Program consists of team-based courses led by an interdisciplinary faculty with a senior level practicum that places students in the workplace for research and group problem-solving. Students will complete courses devoted to the integration of quality in the workplace, applying the knowledge and skill-set they have gained from their major in the field of engineering, business, or computer, mathematical or Physical Science. The capstone course gives QUEST students the opportunity to apply the principles of cross-functional thinking in a corporate environment.

For more details on this program including admissions, please visit the QUEST Program website at www.rhsmith.umd.edu/quest.

Honors

Honor Societies

Beta Gamma Sigma. National scholastic honorary society in business administration. To be eligible students must rank in the upper 5 percent of their junior class or the upper 10 percent of their senior class in the Smith School of Business. Students are eligible the semester after they have earned 45 credits at the University of Maryland, College Park, and have earned a total of 75 credits.

Student Awards

For high academic achievement, students in the School may receive recognition by the Dean's List and Beta Gamma Sigma, National Business Honor Society.

Scholarships

For details on available scholarships, please visit the following website, www.rhsmith.umd.edu/undergrad/Scholarships.html.

Student Professional Organizations

Students may choose to associate themselves with one or more professional organizations.

Visit www.rhsmith.umd.edu/susa for more details and a complete list of organizations.

Course Code: BMGT

COLLEGE OF CHEMICAL & LIFE SCIENCES

1302 Symons Hall, 301-405-2080
www.chemlife.umd.edu/

Professor and Dean: Norma Allewell
Associate Deans: Robert Infantino, Jr., Lawrence Sita
Assistant Deans: Amel Anderson, Lisa Bradley-Klemko

The undergraduate degree programs in the College of Chemical and Life Sciences are:

Chemistry
Biochemistry
Biological Sciences
Environmental Sciences & Policy

The majors in Chemistry and Biochemistry are housed in the Department of Chemistry and Biochemistry and are broadly based to prepare students for employment, graduate school, or professional school. The Biological Sciences major is jointly offered by the departments of Biology, Cell Biology & Molecular Genetics, and Entomology. Biological Sciences students may study broadly in General Biology, or specialize in upper level course work in Cell Biology & Genetics, Ecology & Evolution, Microbiology, or Physiology & Neurobiology. A double major program with the College of Education provides certification to teach High School Chemistry or Biology. The College grants degrees in the Biodiversity and Conservation specialization in the Environmental Science and Policy major.

Opportunities are available across the College and off-campus for undergraduates to participate in basic and applied research projects, and research experience is encouraged for all undergraduate students. Off campus opportunities include National Institutes of Health, Food and Drug Administration, National Institute of Standards and Technology, The Smithsonian, the National Zoo, private biotechnology firms, and many others. The College has special offerings in all of the campus-wide academic programs such as Gemstones, Honors, College Park Scholars, and Freshman Learning Communities.

62 College of Computer, Mathematical, and Physical Sciences

Admission

Students applying for admission should consult the University Admissions section for general information about admissions requirements and recommended courses. Students who plan to enter an undergraduate program in the College of Chemical and Life Sciences should include the following subjects in their high school program: at least two units in the biological sciences and physical sciences (chemistry, physics); and four units of mathematics – algebra, geometry, pre-calculus and calculus. Math and science coursework at the honors/AP/IB level is strongly encouraged. For further information about admissions to the College of Chemical and Life Sciences, contact Eden Garosi, Asst. to the Dean for Admissions, 301-314-8375.

Advising

Entering students are advised by professional advisors in the College's Student Affairs Office. When a student has selected a major or specialization and successfully completed the entry level courses in Chemistry, Mathematics, and the Biosciences, (s)he is assigned to a faculty advisor. All students must meet with an advisor at least once a semester.

Students following pre-professional programs will be advised by knowledgeable faculty. For further information on the pre-professional programs offered at College Park, see chapter 7.

Degree Requirements

See entries under individual degree programs in Chemistry and Biochemistry, Biological Sciences, and Environmental Sciences.

Honors

Students in the College of Chemical and Life Sciences participate in Gemstones, the University Honors program and College Park Scholars, and research-intensive departmental honors programs.

College Park Scholars—Life Sciences

Director: Dr. Lee Hellman
Assistant Director: Dr. Marcia Shofner
1119 Cumberland Hall, 301-405-0528

The College sponsors the College Park Scholars-Chemical and Life Sciences program for entering freshman who are admitted by invitation during the admissions process. Students meet weekly in colloquia with faculty where they learn more about the diverse areas of study in the life sciences. Scholars are also clustered in course sections which fulfill major and general education requirements. International travel-study course opportunities led by College faculty are available as a part of the program. Students create a community of living and learning in a specially-equipped residence hall.

Departmental Honors

Students may apply to participate in research-based departmental honors programs in the each of the departments of the College. Based on the student's performance in research and defense of a written thesis, the department may recommend candidates for the appropriate degree with Departmental Honors or Departmental High Honors. Successful completion of departmental honors will be recognized on a student's academic transcript and diploma. Participation in the University Honors program is not required for entry into a departmental honors program. See departmental listings or consult with an academic advisor in the College for more information.

Joint Biomedical Research Program with the University of Maryland School of Medicine

Students may apply for the joint Biomedical Science Research Program between the Department of Medical and Research Technology (DMRT), University of Maryland School of Medicine, and the College of Chemical and Life Sciences. Students who have successfully completed 60 credits of prerequisite courses at the University of Maryland, College Park may be considered for the program. Beginning in the junior year within the UM School of Medicine, students will develop skills in a variety of biotechnology methodologies as well as become familiar with the operation of analytical instruments used in clinical laboratories, biomedical science, and biosafety and quality assurance issues. Interested students should call the DMRT Admissions Office at 410-706-7664.

For additional information on the College of Chemical and Life Sciences please check our website: www.chemlife.umd.edu.

COLLEGE OF COMPUTER, MATHEMATICAL, AND PHYSICAL SCIENCES (CMPS)

3400 A.V. Williams, 301-405-2677
cmpsque@deans.umd.edu (for CMPS advising questions)
www.cmeps.umd.edu/

Dean: Stephen Halperin
Associate Dean: Ronald L. Lipsman
Associate Dean: Deborah R. Bryant

"For a successful technology, reality must take precedence over public relations, for Nature cannot be fooled." Richard P. Feynman. Nationally recognized for our education, research, faculty and students, the College of Computer, Mathematical and Physical Sciences is a critical educational and scientific resource benefiting the region and the nation.

The College offers every student a high-quality, innovative and cross-disciplinary educational experience. Strongly committed to making studies in the sciences available to all, the College actively encourages and supports the recruitment and retention of women and minorities.

Our students have the opportunity of working closely with first-class faculty in state-of-the-art labs both on and off campus on some of the most exciting problems of modern science and mathematics. We have developed courses to reflect the evolving nature of IT subjects and the rapidly changing world of science and mathematics. As a new approach to undergraduate education, multiple tracks are offered within majors, including tracks for future teachers and tracks with an emphasis on computation.

Students participate in Departmental Honors programs, Corporate Scholars, the Gemstone program, Quest and College Park Scholars. They apply their lab and classroom skills through internships at area companies. Excellent advising and career services are in place to help our undergraduates transition to graduate programs, public service or private sector commerce. Our highly skilled graduates pursue careers in a great many fields and professions.

Structure of the College

The following departments, programs and research units comprise the College:

- Department of Astronomy
- Department of Computer Science
- Department of Geology
- Department of Mathematics
- Department of Atmospheric and Oceanic Science
- Department of Physics
- Center for Scientific Computation and Mathematical Modeling*
- Applied Mathematics and Scientific Computation
- Earth System Science Interdisciplinary Center
- Chemical Physics Program
- Physical Sciences Program
- Statistics Program
- Institute for Advanced Computer Studies
- Institute for Physical Sciences and Technology
- Institute for Research in Electronics and Applied Physics (joint with College of Engineering)

*See the separate listing for the program in chapter 7.

Degree Programs

The following Bachelor of Science (B.S.) degree programs are offered to undergraduates by the departments and programs of the College: Astronomy, Computer Engineering, Computer Science, Geology, Mathematics, Physics, and Physical Sciences.

In addition, Geology sponsors one of the areas of concentration in the Environmental Science and Policy program.

Minors

www.cmeps.umd.edu/undergraduate/programs.htm

The College offers Minors in the following areas:

Astronomy
Computer Science
Surficial Geology
Earth Material Properties
Earth History
Hydrology
Meteorology
Atmospheric Chemistry
Atmospheric Sciences
Physics
Actuarial Mathematics
Statistics

Minors in the College offer students in all disciplines the opportunity to pursue a structured program of study in a field outside their major. Each student who successfully completes a minor will have the accomplishment noted on their transcript. Consult departmental advisors and websites for further information.

Honors

Honors Programs

Undergraduate honors are offered to students in the Physical Sciences Program and the departments of Astronomy, Computer Science, Geology, Mathematics and Physics. Specific information is provided under the individual program descriptions.

College Park Scholars

CPS in Science, Discovery & the Universe—Co-Director: Jay Frogel
CPS in Earth, Life & Time—Director: Thomas R. Holtz, Jr.

The College co-sponsors two College Park Scholars programs, Science, Discovery & the Universe and Earth, Life & Time. These living/learning programs focus around the academic disciplines of the faculty, space sciences (in particular planetary science) and the historical natural sciences (in particular paleontology and evolutionary biology), respectively. In these two-year programs for incoming freshmen, students are brought together around common intellectual interests. The program seeks to inspire students to develop their interests and intellectual capacity by building a community where everyone has shared interests in scholarly pursuits. The Scholars program allows students to experience a small college environment and to work closely with faculty working at the forefront of their fields of expertise.

Dean's List. Each student who has passed at least 12 hours of academic work in the preceding semester with an overall average grade of at least 3.5 will be placed on the Dean's List.

Associate Dean's Commendation. Each student who has passed at least 12 hours of academic work in the preceding semester with an overall average grade between 3.0 and 3.5 will be placed on the Associate Dean's Commendation list.

J. R. Dorfman Prize for Undergraduate Research. An award is presented at the spring Academic Festival for the best research project conducted on or off campus by a current College undergraduate major.

Advising

The Undergraduate Education Office, 3400 A.V. Williams Building, 301-405-2677, centrally coordinates advising and the processing and updating of student records. Inquiries concerning university regulations, transfer credit, Dean's Exceptions and other general information should be addressed to this office. Specific departmental information in relationship to majors is best obtained directly from academic departments. Each department in the College requires semester advising for registration and future course planning. Advisors in departments are available on walk-in and appointment basis. Please check with departments for specifics. Students are also encouraged to contact the office by e-mail at cmisque@deans.umd.edu. Assistance is also available by phone at 301-405-2677.

Scholarships

www.cmmps.umd.edu/undergraduate/index.htm

For currently enrolled students the College accepts merit and need-based award and scholarship applications on the College Scholarship Application Form. Students should complete one form only and submit either electronically or via surface mail. Applicants will be considered for all merit and need-based scholarships administered by the College for which they are eligible. Eligible students will also be contacted by email with information on special programs. For best consideration, College

scholarship applications for each academic year should be submitted by May 10 for the school year beginning the following September.

Departmental scholarships may have different deadlines. For additional information visit our website.

Recruitment

3400 A.V. Williams 301-405-2677

www.cmmps.umd.edu/undergraduate/prospective_students.htm

Recruitment Coordinator: Andrew Janosko (ajanosko@umd.edu)

The College's Recruitment Coordinator serves as a resource and contact person for prospective students interested in bachelor degrees and also serves as a liaison to the Office of Undergraduate Admissions.

Graduation Requirements

1. A minimum of 120 semester hours with at least a C average is required of all Bachelor of Science degrees from the College.
2. Forty-three credit hours that satisfy the general education CORE program requirements of the University. In some instances, courses taken to satisfy these requirements may also be used to satisfy major requirements.
3. Major and supporting coursework as specified under each department or program.
4. The final 30 semester hours must be completed at College Park. Occasionally, the Dean may waive this requirement for up to 16 of the 30 credits cited. Such a waiver is considered only if the student already has 75 credits in residence.
5. Students must be enrolled in the program in which they plan to graduate by the time they register for the last 15 hours.

CMPS Internship and Career Services

3400 A.V. Williams Building, 301-405-2677

www.cmmps.umd.edu/careers/index.htm

The College provides students with an educational experience that will help them succeed in their chosen professions. While the classroom provides academic preparation, the College in co-operation with the University of Maryland's Career Center, assists students with career related considerations. For students majoring in astronomy, computer science, geology, mathematics, physical sciences and physics, the CMPS Career Connection eNewsletter is a valuable resource listing both internships and full-time positions, while the CMPS 497: Internship Seminar provides an academic component for the internship experience. Internships are an invaluable tool for career exploration, internships allow students to build relevant resumes while still in school, and internships also often develop into permanent jobs after graduation.

CMPS Corporate Scholars Program

3400 A.V. Williams Building

www.cmmps.umd.edu/csp/index.htm

Contact: Lawrence Liff at lliff@umd.edu.

The Corporate Scholars Program is a combined internship and scholarship program that provides highly talented CMPS students with work experience related to their fields of study. The program is a unique endeavor by the College to expand and improve our student's education and build better relationships with local corporations.

CMPS Undergraduate Research Experiences

www.cmmps.umd.edu/undergraduate/research.htm

Internships are valuable. Research is fascinating. Students can experience scientific discovery first hand. Knowledge learned in class is used and applied. Students learn the scientific method in a real experimental setting, and see how new scientific knowledge is created. Be a part of the science discovery in CMPS, which places the college among the top 15 public and private universities nationwide. A research experience provides a first hand route into professional problem-solving and may lead to publication. It gives students personal contact with faculty, postdoctoral fellows and graduate students, and a real picture of graduate school. Employers and graduate schools look for research experience in applicants.

64 College of Computer, Mathematical, and Physical Sciences

STAND Science and Technology:

Addressing the Need for Diversity

3400 AV Williams Building, 301-405-0127

www.cmeps.umd.edu/stand/index.htm

Director: Joelle Davis Carter

The College implemented the STAND program to address the longstanding national need to increase the number of underrepresented groups, including Black, Latino/a, Native American and women in the computer, earth, mathematical and physical sciences. STAND serves as the umbrella for both the College undergraduate and graduate activities of the program. STAND supports students by creating a sense of community, rewarding excellence through scholarships and fellowships, instilling the importance of community involvement through recruitment and outreach activities, building lasting relationships through mentoring, and preparing students for success in graduate school, professional careers and beyond.

Current STAND program components include: CMPS SCORE (Student Community for Outreach, Retention and Excellence), the PRIME (Providing Research, Internships, and Mentoring Experiences) Scholarship Program, Community Services Opportunities and the SPIRAL (Summer Program in Research and Learning), which is a six-week summer institute targeted towards sophomore and junior students attending minority institutions. The SPIRAL program enables students to gain an understanding of professional opportunities in mathematics and science, engage in research with college scientists, and prepare for graduate school and professional life.

Research Units

Institute for Advanced Computer Studies

2119 A. V. Williams Building, 301-405-6722

www.umiacs.umd.edu/

Professor and Director: V.S. Subrahmanian

The faculty at the Institute for Advanced Computer Studies conduct fundamental research at the interface between computer science and other scientific disciplines supported by a state-of-the-art computing infrastructure. These interdisciplinary research programs offer opportunities for thesis research and classroom instruction, with a planned new focus on human-computer interaction, bioinformatics and computational biology. The Institute is internationally known in computer vision and graphics, parallel and distributed computing, information visualization and educational technologies, natural language processing and computational linguistics, software engineering, and multimedia and internet computing. Courses and thesis research guidance by Institute faculty are provided under the auspices of the labs, centers, and the academic departments affiliated with the Institute.

Institute for Physical Science and Technology

4211 Computer and Space Sciences Building, 301-405-4877

www.ipst.umd.edu/

Professor and Director: Rajarshi Roy

The faculty members of the Institute for Physical Science and Technology are engaged in the study of pure and applied science problems that are at the boundaries between those areas served by the academic departments. Areas of emphasis vary but include scientific computation, statistical physics and chaotic dynamics, chemical physics, optical (laser) physics, and space and upper atmospheric physics. These interdisciplinary problems afford challenging opportunities for thesis research and classroom instruction. Courses and thesis research guidance by Institute faculty are provided either through the graduate program in chemical physics, the scientific computation and mathematical modeling program, or under the auspices of other departments.

Institute for Research in Electronics and Applied Physics

Energy Research Building, 301-405-4951

www.ireap.umd.edu/

Professor and Director: Dan Lathrop

The Institute for Research in Electronics and Applied Physics (IREAP) is jointly administered by the College and the A. James Clark School of Engineering. The faculty members in IREAP study diverse scientific problems that are on the boundaries between physics and engineering, and teach relevant courses in the College and Engineering Departments. IREAP conducts experimental and theoretical research in nonlinear dynamics (chaos), high-temperature plasma physics, plasma spectroscopy, relativistic microwave electronics, high-brightness charged particle beams, free-electron lasers, laser-plasma interactions, ion beam microfabrication techniques, and microwave sintering of advanced materials. IREAP is recognized internationally as a leading

university research center in these areas of research. We actively encourage undergraduate participation in our research program through independent study, special projects, and internships under faculty supervision.

Center for Automation Research

Center for Automation Research

4417 A.V.Williams Building, 301-405-4526

www.cfar.umd.edu/

Professor and Director: Ramalingam Chellappa

The Center for Automation Research is part of the Institute for Advanced Computer Studies. Its faculty conduct fundamental research in areas related to spatial data, computer graphics, image processing, and computer vision. This interdisciplinary research contributes to classroom instruction, and provides opportunities for thesis research, in these areas. Courses and research guidance by the Center's faculty are conducted under the auspices of the laboratories and academic departments affiliated with the Center.

Earth System Science Interdisciplinary Center

2207 Computer and Space Science Building, 301-405-5599

www.essic.umd.edu/

Professor and Director: Antonio J. Busalacchi

ESSIC is a joint center between the Departments of Atmospheric and Oceanic Sciences, Geology, and Geography together with the Earth Sciences Directorate at the NASA Goddard Space Flight Center. The goal of the Center is to enhance our understanding of how the atmosphere-ocean-land-biosphere components of the Earth interact as a coupled system. This is accomplished via studies of the interaction between the physical climate system (e.g., El Nino) and biogeochemical cycles (e.g., greenhouse gases, changes in land use and cover). The major research thrusts of the Center are studies of Climate Variability and Change, Atmospheric Composition and Processes, and the Global Carbon Cycle (including Terrestrial and Marine Ecosystems/Land Use/Cover Change). The manner in which this research is accomplished is via analyses of in situ and remotely sensed observations together with component and coupled ocean-atmosphere-land models. Together this provides a foundation for understanding and forecasting changes in the global environment and assessing regional implications. Data assimilation and regional downscaling provide the means by which the observations and models are linked to study the interactions between the physical climate system and biogeochemical cycles from global to regional scales. Courses and research guidance by Center faculty are provided through the Departments of Geography, Geology and Atmospheric and Oceanic Sciences, or under the auspices of College interdisciplinary listings.

Center for Scientific Computation and

Mathematical Modeling

4149 Computer Science Instructional Center, 301-405-0648

www.cscamm.umd.edu/

Professor and Director: Eitan Tadmor

The ability to compute at tremendous speeds with gigantic data sets is enabling advances in nearly every discipline. Scientific computation plays a leading role in the study of protein folding, climate evolution, weather prediction, star formation, plasma turbulence, quark-gluon interactions and high-temperature superconductivity. At the Center for Scientific Computation and Mathematical Modeling, graduate students and faculty are working together to develop and to understand fundamental computational techniques, algorithms and analytical tools, and to apply this understanding to outstanding scientific problems in a variety of fields. Undergraduate research opportunities exist for students who are interested in learning how to use computers to understand how the world works.

Materials Research Science and Engineering Center

2120 Physics Building, 301-405-8349

mrsec.umd.edu/

Professor and Director: Ellen Williams

Part of a national network of NSF-funded Materials Research Centers, faculty activities in MRSEC's mandate include materials research, industrial collaborations and educational outreach. Faculty research focuses on polarization dynamics in ferroelectric thin films, surface nanostructures-from fluctuations to driven systems and metal oxides with high spin polarization. MRSEC actively encourages undergraduate participation in their research program through participation in independent study, special projects and internships under faculty supervision and pays special attention to encouraging women and minorities to enter science.

Center for Superconductivity Research

Physics Building, 301-405-6129

www.csr.umd.edu/

Professor and Director: Richard L. Greene

The Center for Superconductivity Research (CSR) conducts interdisciplinary research in the fields of superconductivity, magnetism, ferroelectricity, the synthesis and characterization of advanced materials, the development of scanning-probe microscopes, and quantum computing. Their work impacts technology areas such as communications, digital and analog electronics, medical instrumentation, and computers. The CSR consists of approximately 12 scientists who are also teaching faculty members in the Departments of Physics, Electrical Engineering, Chemistry, or Materials science, as well as another 18 scientists and engineers who are visitors, post-docs, or staff members. Approximately 30 graduate students are working on their research dissertation projects with members of the CSR faculty. The CSR is dedicated to supporting undergraduate research, with more than 20 undergraduates doing research projects each year.

COLLEGE OF EDUCATION (EDUC)

Benjamin Building

Office of Student Services: 301-405-2344

E-mail: coe-student-services.umd.edu

www.education.umd.edu

Dean: Edna Szymanski

The College of Education is a professional college committed to advancing the science and art of teaching/learning, including the practices and processes which occur from infancy through adulthood in both school and non-school settings. The College's mission is to provide preparation for current and future teachers, counselors, administrators, educational specialists, and other related educational personnel, and to create and disseminate the knowledge needed by professionals and policy makers in education and related fields.

The College is organized into six departments, three of which offer undergraduate majors in teacher education: the Department of Curriculum and Instruction, which offers elementary and secondary education programs; the Department of Human Development and Institute for Child Study, which offers an early childhood program; and the Department of Special Education. Enrollment in the professional teacher education programs in the three departments is limited to those who meet the selective admission requirements specified below.

Only students who have been fully admitted to the teacher education programs are permitted to enroll in the professional education course sequences. Students with other majors who have an interest in the area of education may wish to enroll in a variety of other courses offered by the College that deal with schooling, human development, teaching/learning styles, and interaction processes. Students with majors in the Arts and Sciences who have an interest in teaching may wish to consider one of the multiple options for secondary education listed below.

In carrying out its mission, the College is committed to a society which is open to and supportive of the educational aspirations of the widest population of learners, and to continuous research and evaluation in relation to teaching and learning in a multicultural, high-tech world. At times, students may be invited to participate actively with graduate students and faculty members in research undertakings and evaluation processes. Students make use of Educational Technology Services, the micro-teaching laboratory, and professional development in school settings.

In addition to the CORE program requirements, education majors have the opportunity to complete classes in the arts, sciences and/or humanities. In the teacher education courses, students develop professional skills through active experiences in the college classroom and participate in exploring, learning and practicing with children and teachers in classrooms in the community.

Secondary Education Program Options

The College of Education has multiple pathways for students who are interested in teaching at the secondary level.

The **Dual Major** option, which is designed for incoming freshmen or sophomores, leads to the Bachelor's degree with a major in an academic content area plus a second major in secondary education. All secondary majors are required to have an academic content major which satisfies the

requirements of the academic department and meets the standards for teacher certification. Candidates who follow the proposed sequencing of courses can complete both majors in four years with careful advisement and scheduling.

The **Minor in Secondary Education** provides opportunities for undergraduate subject area majors to enroll in a sequence of education courses that helps them to determine if teaching is a viable career option for them. The 15-18 credit minor may be taken prior to admission into a teacher preparation program. If an undergraduate student pursuing or completing the minor desires to enter an education track, the candidate must apply for the dual major program to obtain certification as a secondary education classroom teacher through completion of a Maryland State Department of Education approved program option. Some of the courses students take to complete the Minor in Secondary Education may also be applicable in certification options at the graduate level offered through the Department of Curriculum and Instruction. These students should consult with an advisor in the Department of Curriculum and Instruction to identify the most appropriate option leading to teacher certification and to review the specific admission requirements associated with these programs.

The **Certificate Program** requires completion of an academic major, including coursework specific to meet certification standards in the certificate area, and a bachelor's degree in an approved academic content area, plus the completion of a certificate program in secondary education to meet requirements in UM's approved program for MSDE certification. Selected coursework from the Minor in Secondary Education may be taken prior to admission to the Certificate Program option.

The **Five-Year Integrated Master's with Certification Program**, which is intended for content majors entering the junior or senior year, is for talented students with a minimum GPA of 3.0 who seek to combine undergraduate studies in the content area and professional education as a foundation for a focused professional year at the graduate level leading to secondary-level certification in the subject field and the Master's of Education degree. As undergraduates, admitted students complete their baccalaureate degrees with a major in the relevant content area and a minimum of 12 credits in professional education studies related to teacher certification requirements. In their fifth year, they enroll in a full-year internship and complete graduate-level professional studies that make them eligible for teacher certification and the master's of education degree.

Detailed information about these secondary education program options is available at the College of Education Website, www.education.umd.edu/studentinfo.

Admission to Teacher Education Professional Course Work

Applicants to the University of Maryland who have declared an interest in education are admitted to a department in the College. All majors must meet the selective admission requirements for full admission into the College of Education in order to enroll in course work in the professional teacher education degree program.

For full admission into a teacher education major, a student must (1) complete the English and math lower-level fundamental studies (six credits) with a grade of C or better; (2) earn 45 semester hours with an overall cumulative grade point average of at least 2.5 on a 4.0 scale; (3) submit a personal goal statement that indicates an appropriate commitment to professional education; (4) have prior experiences in the education field; (5) submit three letters of recommendation/reference; (6) submit a signed copy of the College of Education Technical Standards Acknowledgement Form, and (7) have passing scores on the Praxis I. Admission application forms are available in Room 1204 of the Benjamin Building. Only those who are admitted are able to enroll in the professional education sequence. An overall grade point average of 2.5 must be maintained after admission to Teacher Education to continue in the professional education programs. A Teacher Education Appeals Board reviews appeals from students who do not meet the admissions, advancement, or retention criteria. Consult the Student Services Office (Room 1204, Benjamin) for policies and procedures regarding appeals.

Criteria for admission to the Teacher Education program apply to any teacher preparation program offered by the University of Maryland. Thus, students desiring a major in music or physical education should apply to the College of Education for admission to the professional program in Teacher Education. Students who are not enrolled in the College of Education but who, through an established cooperative program with another college, are preparing to teach must meet all admission,

66 College of Education

scholastic and curricular requirements of the College of Education. The professional education courses are restricted to degree-seeking majors who have met College of Education requirements for admission and retention.

Gateway Requirements for Early Childhood and Elementary Education Programs

The Early Childhood and Elementary Education programs are Limited Enrollment Programs, which admit students on a space-available basis. In addition to the requirements for admission to teacher education that are listed above, early childhood and elementary education majors must meet the following gateway requirements:

- (1) completion of a four-credit CORE laboratory physical science, a four-credit CORE laboratory biological science, Elements of Numbers and Operations (MATH 212), and Elements of Geometry and Measurement (MATH 213) with a minimum cumulative GPA in these four courses of 2.7
- (2) completion of Introduction to Teaching (EDCI 280) or Exploring Teaching in Early Childhood (EDHD220) with a grade of B or better
- (3) passing scores on the Praxis I: Academic Skills Assessments (Students will be required to meet the individual cut-off scores for each of the three Praxis I assessments. A composite score will not be accepted for admission.)

Students admitted to the University as freshmen may be directly admitted to the Early Childhood or Elementary Education programs through the end of the schedule adjustment period, second semester, freshman year. It is anticipated that no more than 50% of the available places in each program will come from these groups. In the event that the number of qualified applicants exceeds the available program slots, the students with the most competitive records from high school will gain direct admission to the College of Education. Students who are admitted to campus, but not directly admitted to Education, will be advised in the Division of Letters and Sciences.

At the time of admission, each student directly admitted into the College of Education will enter into a contract that states the requirements for maintaining enrollment, including the time or credit level by which the gateway requirements must be completed.

All other prospective early childhood and elementary education majors may apply for admission during the Spring of the year in which they complete 60 credits including the coursework and gateway admission criteria listed above. Students with advanced credit (60 or more hours) may apply for admission when they meet the gateway requirements. Applications will be reviewed in the Spring, and students who have completed the gateway requirements will be admitted competitively based on GPA, on a space-available basis. The minimum admission GPA for internal and external transfers will be 3.0 for Elementary Education and 2.75 for Early Childhood. Students with the required gateway courses and lower grade point averages will be considered as space is available.

Students may be granted admission to the early childhood or elementary education limited enrollment programs only once. Therefore, once a student has been admitted to the limited enrollment program, if the student is later dismissed for failure to complete the gateway requirements in a timely manner, the student may not reapply to the program.

Detailed information regarding admission to the Teacher Education program, including the gateway requirements for Early Childhood or Elementary Education, is available in the Student Services Office, Room 1204 Benjamin (301-405-2344).

College of Education Technical Standards

All candidates in the UM professional preparation programs are expected to demonstrate that they are prepared to work with children and youth in educational settings. This preparation results from the combination of successful completion of university coursework and field/internship experiences and the demonstration of important human characteristics and dispositions that all educators should possess. These characteristics and dispositions, the *College of Education Technical Standards*, are grouped into four categories: Communication/Interpersonal Skills, Emotional and Physical Abilities, Cognitive Dispositions, and Personal and Professional Requirements.

Technical standards serve several important functions, including, but not limited to: (a) providing information to those considering preK-12 and community professional careers that will help such students in their career decision-making; (b) advising applicants of non-academic criteria considered in admissions decisions made by the University's preK-12 and community professional preparation programs; (c) serving as the basis for feedback provided to students in these programs regarding their progress toward mastery of all program objectives; and (d) serving as the basis for the final assessment of attainment of graduation requirements and recommendation for certification.

Candidates in the undergraduate teacher preparation programs will be required to submit a College of Education Technical Standards Acknowledgement Form as part of the College's selective admissions review in the sophomore or junior year. Self-assessments of candidates and faculty evaluations of students on the technical standards also will occur during each field/internship experience. Students will be monitored and given feedback throughout the program. At specified points, students will be notified of inadequacies that may prevent them from progressing through their program. Documentation and consensus regarding the student's functioning will be sought before any action is taken. Candidates who experience deficiencies in any areas will be encouraged to seek appropriate professional help from university or other sources. If the problem seems to be beyond remediation, continuation in professional programs, graduation or recommendation for certification may be denied.

Technical standards may be met with, or without, accommodations. The University complies with the requirements of Section 504 of the Rehabilitation Act and the Americans with Disabilities Act of 1990. Therefore, the College of Education will endeavor to make reasonable accommodations with respect to its technical standards for an applicant with a disability who is otherwise qualified. For detailed information on the College of Education Technical Standards, see www.education.umd.edu/studentinfo/teacher_certification/forms/technicalstndrdsolicy.doc

Yearlong Internship (Student Teaching)

The yearlong internship, which is the culminating experience in the teacher preparation program, takes place in a collaborating school (i.e., partner school, PDS – Professional Development School). The yearlong internship consists of one semester of methods and one semester of student teaching. Each teacher candidate's internship will vary according to the unique attributes of their teacher education program. All internships will provide teacher candidates with the opportunity to integrate theory and practice through a comprehensive, reality-based experience. The yearlong internship is arranged through the College of Education in collaboration with the school site coordinators (i.e., PDS Coordinators) and the designated schools in the partnership.

The yearlong internship is a full-time commitment. Interference with this responsibility because of employment or course work is strongly discouraged. Teacher candidates assigned to schools for this internship are responsible for their own transportation and living arrangements and should be prepared to travel to whichever school has been assigned. **Student teaching requires a special fee. Please refer to the Schedule of Classes under Financial Information: Fees.**

In order to receive a yearlong internship placement, all teacher candidates must make application the semester prior to the beginning of the methods portion of the internship year. Prospective student teachers must have been admitted to Teacher Education and have completed all prerequisites. Prior to assignment, all students in teacher preparation programs must have: (1) maintained an overall grade point average of at least 2.5 with a minimum grade of "C" in every course required for the major; (2) satisfactorily completed all other required course work in their program; (3) received a favorable recommendation from their department; (4) attained qualifying scores for the State of Maryland on the Praxis I and Praxis II assessments; (5) applied for a year-long internship placement through the College of Education during the semester prior to the internship year; (6) received favorable ratings from prior supervised experiences in school settings; (7) received favorable evaluations on the College of Education Technical Standards; and submitted a criminal history disclosure statement. In addition, state law gives the local school to which the student teacher is assigned the discretion to require a criminal background check prior to placement. Early Childhood Education students must have a certificate indicating freedom from tuberculosis and proof of immunization.

College of Education Repeat Policy

All registrations in the student teaching portion of the year long internship, regardless of whether a student withdraws or takes a leave of absence, will be counted as an attempt under the campus repeat policy. Only two registrations will be allowed. After two registrations, further attempts at student teaching must be approved by the department and the school-system professionals involved in the teacher candidate's internship experience. This policy applies only to students in the College of Education during the student teaching portion of the year-long internship.

Graduation Requirements

The College of Education confers the degrees of Bachelor of Arts (B.A.) or Bachelor of Science (B.S.) depending on the amount of liberal arts study included in a particular degree program. Minimum requirements for graduation are 120 semester hours. Specific departmental program requirements for more than the minimum must be fulfilled.

In addition to the university's general education requirements (CORE) and the specific requirements for each curriculum, the College requires that all majors complete a Foundation of Education course (e.g., EDPL 301) and, depending upon the teacher education major, six to twelve semester hours of reading course requirements. A grade of C or better is required in all pre-professional and professional course work required for the major. An overall grade point average of 2.5 must be maintained after admission to Teacher Education. A grade of S is required in the student teaching portion of the yearlong internship. All teacher candidates are required to obtain satisfactory evaluations on the College of Education Technical standards and attain qualifying scores for the State of Maryland on the Praxis I and Praxis II assessments. Detailed information about the Praxis assessments is available in the Student Services Office, Room 1204 Benjamin.

Exceptions to curricular requirements and rules of the College of Education must be recommended by the student's advisor and department chairperson and approved by the Dean.

Accreditation and Certification

All bachelor's-degree teacher preparation programs are accredited by the National Council for Accreditation of Teacher Education and have been approved by the Division of Certification and Accreditation of the Maryland State Department of Education. Accreditation provides for reciprocal certification with other states that recognize national accreditation.

The Maryland State Department of Education issues certificates to teach in the public schools of the state. In addition to graduation from an approved program, the Maryland State Department of Education requires satisfactory scores on the Praxis I and II exams for certification. At the time of graduation, the College informs the Maryland State Department of Education of the graduate's eligibility for certification. Under Maryland law, criminal background checks may be required and considered by the State Department of Education in the awarding of teaching certification, and by employers before granting employment in the teaching field. Certification may be denied or revoked for individuals who have been convicted of crimes of violence and/or child abuse.

The Maryland State Department of Education (MSDE) requires completion of additional courses in reading. Students in secondary, pre-K-12 (Art, Music and Physical Education), and secondary special education must complete a six credit sequence. Students in early childhood, elementary and early grades special education must complete a twelve credit sequence. Check with your department advisor for information on meeting these requirements.

College of Education Title II Institutional Data on Teacher Preparation

The College of Education pass rates for the Title II reporting period for the 2004-2005 academic year indicated that we exceeded or met the statewide pass rate in all categories. When the data were summarized, the College had a 100% pass rate; the statewide average was 96%. (Institutional pass rates: Basic Skills – 100%; Professional Knowledge – 100%; Academic Content Areas – 100%; Special Populations – 100%) Data tables reporting single-assessment institutional pass rates, aggregate institutional pass rates, and summary pass rates are available through the College website, www.education/umd.edu. Information on the number of students enrolled and the student teaching experiences is highlighted below:

- Total number of students enrolled during 2004-2005: **1471**
- Total number of students in programs of supervised student teaching during academic year 2004-2005: **403**
- Total number of supervising faculty for the teacher preparation program during 2004-2005: **48**
- The student teacher/faculty ratio. **8.4 students per faculty member**
- The average number of hours per week required of student participation was **40 hours**. The total number of weeks of supervised student teaching required is **16 weeks**. The total number of hours is **640 hours**.
- The teacher preparation program is currently **approved** by the state.
- The teacher preparation program is **not** currently designated as “low-performing” by the state as defined by section 208(a) of the HEA of 1998.
- The teacher preparation program is currently designated as “at risk of being designated as ‘low performing’ by the state” as defined by section 208(a) of the HEA of 1998.

Special Resources and Opportunities

The College of Education offers many special resources and facilities to students, faculty, and the community:

Center for Accelerating Student Learning
 Center for Children, Relationships and Culture
 Center for Education Policy and Leadership
 Center for Human Services Development
 Center for the Study of Assessment Validity and Evaluation
 Center for Young Children
 Connections Beyond Sight and Sound
 Educational Policy Reform Research Institute
 Institute for the Study of Exceptional Children and Youth
 International Center for Transcultural Education
 K-16 Partnership and Development Center
 Maryland Assessment Research Center for Education Success (MARCES)
 Maryland Institute for Minority Achievement and Urban Education
 Maryland Literacy Research Center
 Mathematics and Science Teaching Centers
 Mid-Atlantic Center for Mathematics Teaching & Learning
 National Center on Education, Disability, and Juvenile Justice
 National Reading Research Center

College of Education Honors Program

Undergraduate teacher education majors meeting certain scholastic requirements may participate in the College of Education Honors Program. The objective of this program is to examine the field of education at levels of depth and breadth that go beyond that provided by any one teacher preparation sequence.

The program consists of three components: group, cross-disciplinary, and individual study. The Honors Program represents an excellent springboard for students with aspirations to on to graduate school. For further information contact Dr. Christy Corbin (1117H, Benjamin Building, 301-405-7793).

College Park Scholars—Advocates for Children

College Park Scholars is an innovative two-year living/learning program for academically talented students. Admission is by invitation. Students attend weekly, faculty-led colloquia, which engage students in discussion and debate with prominent experts in the field.

The College Park Scholars Advocates for Children Program involves students in advocacy efforts targeting a broad range of social, educational, policy and justice issues affecting diverse children, families and communities. The Advocates program is structured so that students become informed in areas of personal interest that relate to children, families and communities. They then learn to translate their knowledge into advocacy for social justice and change. Advocacy involvement includes political lobbying, grassroots organizing and service activities in schools and communities.

For more information on the College Park Scholars: Advocates for Children Program, visit 1125 Cumberland Hall or phone 301-314-2777.

68 A. James Clark School of Engineering

The Student Services Office

1204 Benjamin Building, 301-405-2344

The Student Services Office provides academic advising for education students regarding admission, orientation, registration, graduation, and certification. At other times, students who have been admitted to the College of Education receive academic advising through their departments. Students are required to complete an academic audit in the Office of Student Services upon admission to the professional teacher education degree program. Information about the Praxis assessments and the College of Education Scholarships is also available in Student Services.

University Credentials Service, Career Center

3100 Hornbake Library, 301-314-7225

www.CareerCenter.umd.edu

All seniors graduating in the College of Education are encouraged to complete a credentials file with the Career Center. Credentials consist of student teaching evaluations and recommendations from academic and professional sources. An initial registration fee is required and enables the Career Center to send a student's credentials to interested educational employers, as indicated by the student. Students may also file credentials if completing teacher certification requirements or advanced degrees and if interested in teaching, administrative or research positions in education.

Other services available through TERP (The Employment Registration Program) Online include **job listings** in public and private schools and institutions of higher learning, **on-campus interviews** with in-state and out-of-state school systems, and **resume referral** to employers interested in hiring education majors. Information and applications from school systems throughout the country, job search publications, and various employment directories are available in the Career Center.

Educational Technology Services

0234 Benjamin Building, 301-405-3611

Educational Technology Services helps the College advance the effective use of technology in support of student learning. The Center provides a range of technology and media resources and services to faculty and students. The Center also offers professional development courses, technology planning, consulting assistance, and other outreach services to educators and policy makers throughout the state and region. A number of research, development, and demonstration activities in educational technology are also conducted through the Center's grants and contracts with federal, state, and private funding sources.

Center for Mathematics Education

2226 Benjamin Building, 301-405-3115

The Center for Mathematics Education provides a mathematics laboratory for undergraduate and graduate students. Occasionally there are tutoring services for children and adolescents. These services are offered in conjunction with specific graduate and undergraduate courses in elementary and secondary school mathematics. Center faculty are engaged in research in mathematics education, serve as consultants to school systems and instructional publishers, and provide in-service teacher education in addition to graduate degree programs.

Center for Young Children (CYC)

Center for Young Children Building, 301-405-3168

The Center for Young Children is part of the Institute for Child Study/Department of Human Development in the College of Education. It offers a creative learning experience for children three, four, and five years old whose parents are affiliated with the University. The Center engages in child study, curriculum development, and teacher training. Its research and observation facilities are available to parents, faculty, and other persons concerned with the care and education of young children.

Science Teaching Center

2226 Benjamin Building, 301-405-3161

The Science Teaching Center offers undergraduate and graduate courses and programs in science teaching and in science education research. Center faculty conduct research in science learning and instruction, at levels from elementary school to college, as well as contribute to local, state, and national science education reform efforts.

Student and Professional Organizations

The College sponsors chapters of Phi Delta Kappa; the Teacher Education Association of Maryland Students (TEAMS), a state/national education association; the Student Assembly, a student governance organization; and Kappa Delta Pi, an honor society in education. The Mary McLeod Bethune Society is a pre-professional organization concerned with minority issues and education. A Chapter of the Council for Exceptional Children is open to undergraduate and graduate students in Special Education. The Plan of Organization for the College of Education calls for undergraduate student representation on both the College of Education Assembly and College Senate. These organizations assume a critical role in policy development for the College of Education. The Assembly meets at least once a year during the fall semester for its annual meeting. Senate meetings typically occur once a month during the fall and spring semesters. Six full-time undergraduate students are elected at-large as voting members of the Assembly. At least one representative from each of the departments with undergraduates serves on the Assembly. Of the six Assembly members, one is elected to serve as a delegate to the College of Education Senate. Students interested in receiving further information about the College Assembly or Senate should contact the Office of Student Services, Room 1204 Benjamin.

In several departments there are informal organizations of students. Students should contact the individual departments or, in the case of College-wide groups, the Student Services office, for additional information regarding these organizations.

A. JAMES CLARK SCHOOL OF ENGINEERING (ENGR)

1124 Glenn L. Martin Hall (formerly Engineering Classroom Building),

www.engr.umd.edu

Professor and Dean: Nariman Farvardin

Associate Dean: Gary A. Pertmer

Undergraduate Advising and Academic Support: 301-405-3855

Co-op and Career Services: 301-405-3863

Center for Minorities in Science and Engineering: 301-405-3878

Women in Engineering: 301-405-3931

International Programs: 301-405-3857

The mission of the Clark School of Engineering at the University of Maryland is to provide quality engineering education, to conduct strong research programs, to foster a close partnership with industry and government, and to provide related service to the campus community and the community at large. A major focus of the School's activities is to provide a quality engineering education with sufficient scope to include the basic and specialized engineering training necessary to the current and emerging needs of society. The School has related responsibility to contribute to the advancement of knowledge by conducting research at the cutting edge of science and technology. Since science and technology are rapidly advancing, the School also has a professional responsibility to provide continuing education programs so the practicing engineer can remain effective. The School faculty and administration also sees as part of its mission, an obligation to serve the needs of the campus community and the community at large in the spirit of collegial cooperation.

Engineers also occupy an intermediary position between scientists and the public because, in addition to understanding scientific principles, they are concerned with the timing, economics, and values that define the use and application of those principles. With this in mind the School fosters a close partnership with industry and government, and also reaches out to both the campus community and the community at large with its services.

Direct Admissions Requirements

1. Admission to the Clark School of Engineering is limited. Applicants are reviewed and will be admitted directly on a competitive basis. Evaluation is based on high school grades, standardized test scores, activities, leadership and demonstrations of potential to succeed. An applicant may select any of the majors offered within the School. An applicant also has the option of entering as an Undecided Engineering major and will typically choose a degree program in the first year.
2. National Merit and National Achievement Finalists and Semifinalists, Maryland Distinguished Scholar Finalists, and Banneker/Key Scholars are admitted directly to the School.

45-Credit Review

Directly admitted freshmen will be subject to an academic review at the end of the semester in which they attain 45 University of Maryland credits. In order to successfully complete the review, students must have an overall GPA of 2.0 and have completed ENES 100 and the following sequence of Gateway requirements: MATH 141, PHYS 161, and CHEM 113 or CHEM 135 with a grade of 2.0 or better.

Only one repeat of a single course to the set of Gateway courses, either at the University of Maryland or at any other university or college, will be considered to meet the review requirements. A course in which a grade of "W" (withdrawn) is earned is counted as an attempt. Students who fail to meet these requirements by the semester in which they attain 45 University of Maryland credits may be dismissed from the Clark School and may not reapply.

Transfer Admission

Direct Admissions Requirements

Internal and External Transfer students will be directly admitted to the Clark School if they meet the Gateway requirements, MATH 141, PHYS 161, CHEM 113 or CHEM 135 with a grade of 2.0 or better, have completed Fundamental Studies English, have completed at least one Humanities or Social Studies course, and have a minimum cumulative GPA of 3.0, and who have not previously been admitted to the Clark School of Engineering. Only one repeat of a single course to the set of Gateway courses, either at the University of Maryland or at any other university or college, will be considered to meet the review requirements. A course in which a grade of "W" (withdrawn) is earned is counted as an attempt. Students may apply on or before the semester in which they attain 45 earned credits.

Internal and External Transfer students who do not meet the Direct Admissions Requirements but have completed the Gateway requirements may apply and be considered for admission on a competitive basis.

Appeal Process

All students may appeal. Students directly admitted as freshmen who are dismissed because of failure to meet Gateways or to be in good academic standing at 45 credits may appeal in writing directly to the Associate Dean for Education in the Clark School. All other students who are denied admission may appeal to the Office of Admissions of the University.

Special Note

Students with a previous B.A. or B.S. degree will be admitted to the Clark School of Engineering with a minimum GPA of 3.0 and a completion of MATH 140, MATH 141, CHEM 113 or CHEM 135, and PHYS 161 with a grade of 2.0 or higher in each.

Graduation Requirements

Structure of Engineering Curricula: Courses in the normal curriculum or program and prescribed credit hours leading to the degree of Bachelor of Science (with curriculum designation) are outlined in the sections describing each department in the Clark School of Engineering. No student may modify the prescribed number of hours without special permission from the Dean of the School. The courses in each curriculum may be classified in the following categories:

1. Courses in the CORE Liberal Arts and Science Studies Program.
2. Courses in the physical sciences, mathematics, chemistry, physics.
3. Related technical courses, engineering sciences and other courses approved for one curriculum but offered by another department.
4. Courses in the major department. A student should obtain written approval for any substitution of courses from the department chair and the Dean of the School. The courses in each engineering curriculum, as classified below, form a sequential and developmental pattern in subject matter. In this respect, curricula in engineering may differ from curricula in other colleges. Some regulations which are generally applicable to all students may need clarification for purposes of orderly administration among engineering students (see the Academic Regulations in chapter 4). Moreover, the Clark School of Engineering establishes policies which supplement university regulations.

School Regulations

1. The responsibility for proper registration and for satisfying stated prerequisites for any course must rest with the student as does the responsibility for proper achievement in courses in which the student is enrolled. Each student should be familiar with the provisions of this catalog, including the Academic Regulations.
2. Required courses in mathematics, physics, and chemistry have highest priority. It is strongly recommended that every engineering student register for mathematics and chemistry or mathematics and physics each semester until the student has fully satisfied requirements of the Clark School of Engineering in these subjects.
3. To be eligible for a bachelor's degree in the Clark School of Engineering, a student must have an overall average of at least a 2.0 and a grade of C (2.0) or better in all engineering courses (courses with an EN prefix). Responsibility for knowing and meeting all graduation requirements in any curriculum rests with the student.
4. In addition to the requirement for a C (2.0) or better in all EN courses, all students who begin college-level work, either at the University of Maryland or any other institution in the Spring 2005 semester or later, must receive a grade of C (2.0) or higher in all technical courses (e.g. mathematics, physics, etc) used to satisfy major requirements.
5. A course taken at UM in which a grade has been earned may not be repeated via transfer from another institution.
6. All students are required to complete a number of general education courses and must follow the university's requirements regarding completion of the general education (CORE) Program. Consult the Academic Regulations section of this catalog for additional information. Engineering students who began college-level work (either at the University of Maryland or at other institutions) during the Fall 1989 semester or later are required to complete a junior-level technical writing course regardless of their performance in freshman English classes. This represents a School policy, not a University-wide policy.
7. All degree programs in the Clark School of Engineering require a minimum of 120 credits plus satisfaction of all department, School, and University general education (CORE) program requirements. Students should be aware that for all currently existing engineering programs the total number of credits necessary for the degree exceeds 120 by some number that depends on the specific major.

Curricula for the various engineering departments are given in this catalog to illustrate how the programs can be completed in four years. These curricula are rigorous and relatively difficult. Surveys have shown that only about one-third to one-half of the students actually receive an engineering degree in four years. The majority of students (whether at Maryland or at other engineering schools nationwide) complete the engineering program in four and one-half to five years. It is quite feasible for a student to stretch out any curriculum; this may be necessary or desirable for a variety of reasons. However, students should seek competent advising in order to ensure that courses are taken in the proper sequence.

All students are urged to request a senior audit form in the Clark School of Engineering, Office of Undergraduate Advising and Academic Support at least two semesters before graduation to review their academic progress and discuss final graduation requirements.

Advising

Advising is mandatory for all students in the Clark School. Advising is provided by the Office of Undergraduate Advising and Academic Support, located in Room 1124 Glenn L. Martin Hall, 301-405-3855, and is available by appointment Monday through Friday from 8:30 a.m. to 4:30 p.m. Walk-in advising is also available at some times during the week. Appointments for other hours can be made with a special request. When a student is starting his or her lower level major courses, typically in the first semester of the second year, advising is done primarily in the student's department. Refer to the individual program for additional information.

Departments and Degrees

The Clark School of Engineering offers the degree of Bachelor of Science in the following fields of study: Aerospace Engineering, Biological Resources Engineering (see also College of Agriculture and Natural Resources), Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Fire Protection Engineering, Materials Science and Engineering, Mechanical Engineering, B.S. Engineering (Engineering Option and Applied Science Option). Except for the Applied Science Option of the B.S. Engineering degree, all of the above programs are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

70 A. James Clark School of Engineering

The Freshman-Sophomore Years

The freshman and sophomore years in engineering are designed to lay a strong foundation in mathematics, physical sciences, and the engineering sciences upon which the student will later develop a professional program during the upper division (junior and senior) years. During the first two years, students are introduced to the concepts of engineering design and work in multidisciplinary teams. The School course requirements for the freshman and sophomore years are similar for all students, regardless of their intended academic program, thus affording the student maximum flexibility in choosing a specific engineering specialization.

Engineering Sciences

Engineering Science courses represent a common core of basic material offered to students of several different departments. All freshman and sophomore students of engineering are required to take ENES 100. Other ENES courses, 102, 220, 221, and 230, are specified by the different departments or taken by the student as electives. The responsibility for teaching the engineering science courses is divided among the engineering departments. In addition to the core courses noted above, several courses of general interest to engineering or non-engineering students have been given ENES designations. See the List of Approved Courses in chapter 8 for further descriptions of these courses.

Freshman Curriculum

See individual department requirements in chapter 7. Entering freshman math placement is determined solely by performance on the University math placement exam and not on the Math SAT score. Placement in MATH 115 or lower will delay by a semester eligibility to take certain engineering courses.

Sophomore Year

No later than the sophomore year, a student should select an academic degree program (Aerospace, Biological Resources, Chemical, Civil, Computer, Electrical, Fire Protection, Mechanical, or Materials Science and Engineering) and this department assumes the responsibility for the student's academic guidance, counseling, and program planning from that point until the completion of the degree requirements of that program as well as the School. For the specific requirements, see the curriculum listing in each engineering department.

Dual Degree Program

The Dual Degree Program is a cooperative arrangement between the Clark School of Engineering and selected liberal arts colleges which allows students to earn undergraduate degrees from both institutions in approximately five years. A student in the Dual Degree Program will attend the liberal arts college for approximately three academic years (minimum 90 semester hours) and the Clark School of Engineering at the University of Maryland for approximately two academic years (minimum hours required determined individually approximately 60 semester hours).

Dual degree candidates may participate in any of the baccalaureate programs in the Clark School of Engineering.

At the present time the participating institutions in Maryland and the District of Columbia are American University, Bowie State University, Columbia Union College, Coppin State College, Frostburg State University, Morgan State University, College of Notre Dame of Maryland, St. Mary's College of Maryland, Salisbury State University, Towson State University, Western Maryland College, Trinity College, and Washington College. Also participating in the program are Kentucky State University, King College in Tennessee, Shippensburg State University in Pennsylvania, and Xavier University in Louisiana.

Engineering Abroad

Preparation for practicing engineering in the global marketplace is increasingly important for new engineers and also for engineers to advance in their career. The Clark School offers opportunities for students to study abroad and/or intern abroad at locations in Europe, Asia, North and South America, and Australia during their college career. Students may elect to study abroad for one or two semesters and to intern aboard for eight weeks or more. Research experiences abroad are also available. Some study/internship abroad programs require fluency in the native language, while other programs offer opportunities in English. Faculty advisors and the study abroad advisor will help students select an appropriate program and course work.

For further information on study and/or internship abroad programs, students should contact the director of undergraduate recruitment and special programs in the Clark School at 301-405-3857 or visit our web site at www.eng.umd.edu/international.

Minors

Minor in International Engineering: 15 to 21 credits. Students complete the course "International Business Cultures for Engineering and Technology" plus additional courses in language, culture studies, or internationally related students, and an international engineering experience abroad. Contact the director of Undergraduate Recruitment and Special Programs (301-405-3857) or visit the web at www.eng.umd.edu/international for more information. Students who fulfill minor requirements will receive a notation on their official transcript.

Minor in Project Management: 15 credits. A basic understanding of project management is becoming increasingly important for engineers. Such knowledge enables them to contribute immediately to employers, and to advance their careers. In addition to a strong engineering background, there is significant need for engineers to understand the fundamentals of managing projects in order to effectively participate as members of project teams. Students who successfully complete minor requirements will receive a notation on their official transcript. Contact John Cable, Project Management Minor Advisor (jcable@umd.edu) or visit the web site www.pm.umd.edu/undergrad_programs/undergrad_minor_courses/index.html for more information.

Engineering Transfer Programs

Most of the community colleges in Maryland provide one- or two-year programs which have been coordinated to prepare students to enter the sophomore or junior year in engineering at the University of Maryland. These curricula are identified as Engineering Transfer Programs in the catalogs of the sponsoring institutions. The various associate degree programs in technology do not provide the preparation and transferability into the degree curricula as the designated transfer programs. A maximum of one-half of the degree credits (approximately 60 semester hours) may be transferred from a two-year community college program.

There may be some courses which are not offered by the schools participating in the engineering transfer program. Students should investigate the feasibility of completing these courses in summer school at the University of Maryland before starting their junior course work in the fall semester.

Financial Assistance

The Clark School offers scholarships to talented undergraduate engineering students. This is a competitive scholarship program with scholarships awarded for merit. Financial need and a variety of other factors may also be considered.

The **Benjamin T. Rome Scholarship** is a full-ride scholarship awarded to a new freshman student each year. The Rome Scholarship covers all expenses (tuition and fees, room and board) plus a book allowance and a stipend. The award is renewable for three additional years provided the recipient maintains good academic standing and makes progress toward an engineering degree.

To be considered for all engineering scholarships, students must complete the online scholarship application. The deadline for new freshman is March 1st and the deadline for current or new transfer students is May 31st. For more information contact Jane Fines, Director of Undergraduate Recruitment & Special Programs, 301-405-3857 or visit the web at www.eng.umd.edu/scholarships.

Honors

The Clark School offers an Engineering Honors Program that provides eligible students the opportunity to pursue an enriched program of studies that will broaden their perspectives and increase the depth of their knowledge. Engineering students meeting all of the following criteria are eligible to apply:

1. Upper fourth of engineering juniors and seniors
2. Junior standing or 60 applicable credits
3. Completion of at least one semester at UMCP

A. James Clark School of Engineering 71

The requirements for completing the program are as follows:

1. A Honors Research Project which often can be used as a technical elective, a written report, and an oral presentation to a faculty panel of the EHP;
2. Successful completion of both Engineering Honors Seminars (ENES 480 and ENES 481, 1 credit hour each);
3. Maintenance of a GPA to remain in the upper third of the class.

For more information, visit the web at www.eng.umd.edu/current/current_honors.html

Research and Service Units

The Center for Minorities in Science and Engineering

1134 Glenn L. Martin Hall, 301-405-3878
Director: Rosemary L. Parker

The Center is dedicated to increasing the enrollment and graduation rates of African American, Hispanic, and Native American students majoring in engineering. The Center provides a complete package of services designed to assist students from pre-college through completion of the undergraduate degree. Services include academic advising, tutorial assistance, scholarship information, the BRIDGE Program, outreach programs, job information and support of student organizations.

Engineering Co-op and Career Services

1131 Glenn L. Martin Hall, 301-405-3863
co-op@eng.umd.edu, www.coop.eng.umd.edu

Whether it's to wire robots in a car plant, monitor a waste water management project, or reformulate cough syrup for a pharmaceutical company, the Engineering Co-op and Career Services Office assists students in finding cooperative education (co-op) and internship positions in private industry and the government. Students may work full-time or part-time during the fall, spring and/or summer semesters. Co-op and internship positions complement classroom learning and provide students the opportunity to gain professional level experience, build mentoring relationships, integrate theory and practice, confirm career choices, and help finance their education.

The first step in the application process is to attend an orientation session that focuses on internship/co-op search strategies. After writing a resume and having it critiqued by our office, students are given permission to upload their resume into our database eLink of engineering jobs and on-campus interviews. To assist students in their search we offer a wide variety of workshops on topics such as effective resumes, interview strategies, professionalism, career fair preparation, salary negotiation, and advanced job search techniques. Our website lists the current schedule of workshops. In addition, students have the opportunity to meet employers by participating in our career fairs, employer information sessions, and special job search presentations conducted by engineering recruiters. Visit our website for more information: www.coop.eng.umd.edu.

Office of Undergraduate Advising and Academic Support

1124 Glenn L. Martin Hall, 301-405-3855
Director: Jenna Dolan
engrhelp@deans.umd.edu

The Office of Undergraduate Advising and Academic Support Office provides a broad variety of services to assist students during their collegiate careers. Individual advising may focus on a number of student related issues including: course selections, schedule planning, university policy interpretations, career choices, social and personal adjustments and academic concerns. The office also clears students for graduation, evaluates transfer credits from other institutions, provides orientation to new students, and is instrumental in helping students process administrative forms. The staff works closely with other campus offices to identify resources that address the various needs of our students.

Women in Engineering Program

1134 Glenn L. Martin Hall, 301-405-3931
Director: Paige E. Smith

The Women in Engineering Program (WIE Program) is dedicated to increasing the enrollment, retention, and graduation rates of females in the School, as well as identifying and addressing this group's unique needs. The Program provides a comprehensive set of initiatives designed to encourage and assist women students to become successful professional engineers.

Services offered include research fellowships, professional mentoring program, information listserv, website, scholarship database, first year mentoring program, workshops on careers, outreach programs, speakers, and support of women engineering organizations.

Undergraduate Research Programs

Undergraduate research programs allow qualified undergraduate students to work with research laboratory directors in departments, thus giving students a chance for a unique experience in research and engineering design. Projects in engineering allow undergraduate students to do independent study under the guidance of faculty members in an area of mutual interest. For more information contact your department or the Dean's office.

Engineering Information Technologies (EIT)

0123 Glenn L. Martin Hall, 301-405-0174
Executive Director: James F. Zahniser, 301-405-3885
www.it.umd.edu

Keeping pace with the latest developments in the area of information technologies worldwide, the Clark School of Engineering provides a state-of-the-art computing environment that will be the standard for engineers in the years ahead. Faculty and students have access to computer workstations with a wide range of engineering software and multi-media enabled classrooms with the latest presentation capabilities. In addition, EIT provides access and support on the latest tools and services for online collaboration, presentation technologies, and distance learning.

Distance Education Technology and Services

2104 Martin Hall, phone: 301-405-4910 - Fax: 301-314-9639
www.dets.umd.edu

Distance Education Technology and Services, DETS, provides distance education technology and support service to the A. James Clark School of Engineering and the UMCP campus. We serve over 500 students per year by providing graduate and undergraduate courses in engineering and other related fields. In addition, we also provide technical services to the campus such as video conferencing, video capturing, satellite services and more. For further information, please reference the DETS web site at www.dets.umd.edu.

Student Organizations

Professional Societies

Each of the engineering departments sponsors a student chapter or student section of a national engineering society. The student chapters sponsor a variety of activities including technical meetings, social gatherings, and School or University service projects. All students are strongly encouraged to join one or more of these chapters. These organizations are American Helicopter Society, American Institute of Aeronautics and Astronautics, American Institute of Chemical Engineers, American Nuclear Society, American Society of Agricultural Engineers, American Society of Civil Engineers, American Society of Mechanical Engineers, Black Engineers Society, Institute of Electrical and Electronics Engineers, Minerals, Metals and Materials Society, Society of Asian Engineers, Society of Automotive Engineers, Society of Fire Protection Engineers, Society of Hispanic Engineers, and Society of Women Engineers.

Honor Societies

The Clark School of Engineering and each of the engineering departments sponsor honors societies. Nominations or invitations for membership are usually extended to junior and senior students based on scholarship, service and/or other selective criteria. Some of the honors organizations are branches of national societies; others are local groups: Tau Beta Pi (College Honorary); Alpha Epsilon (Agricultural Engineering); Alpha Nu Sigma (Nuclear Engineering); Chi Epsilon (Civil Engineering); Eta Kappa Nu (Electrical Engineering); Omega Chi Epsilon (Chemical Engineering); Pi Tau Sigma (Mechanical Engineering); Salamander (Fire Protection Engineering); and Sigma Gamma Tau (Aerospace Engineering).

72 College of Health and Human Performance

COLLEGE OF HEALTH AND HUMAN PERFORMANCE (HLHP)

3310 HLHP Building, 301-405-2438; Records, 301-405-2357
www.hhp.umd.edu/

Dean: Robert S. Gold
Associate Dean: Jerry Wrenn
Assistant Dean: Viki Annard

The College of Health and Human Performance provides preparation leading to the Bachelor of Science degree in the following professional areas: Physical Education (K-12), Community Health and Family Studies. The College also offers curricula in Kinesiological Sciences. In addition, each department offers a wide variety of courses for all university students. These courses may be used to fulfill the general education requirements and as electives.

Programs combining research, service and instruction are provided by the Children's Health and Developmental Clinic, the Adults' Health and Developmental Program, and the Sports Medicine and Physical Fitness Center. More detailed information regarding these program offerings is available through the individual departments.

Advising

At the time of matriculation and first registration, each student is assigned to a member of the College faculty who acts as the student's academic advisor. These assignments are made by the individual departments and depend upon the student's chosen major. Students who are enrolled in the College, but are undecided regarding their major, should contact the Assistant Dean, 3310 HLHP Building, 301-405-2473.

Departments and Degrees

The College of Health and Human Performance offers the baccalaureate in the following fields of study: Physical Education, Kinesiological Sciences, Community Health and Family Studies. The degree of Bachelor of Science is conferred upon students who have met the conditions of their curricula as herein prescribed by the College of Health and Human Performance.

Each candidate for a degree must file a formal application with the Records Office according to the scheduled deadlines for the anticipated semester of graduation.

Honors

Phi Alpha Epsilon. Honorary Society of the College of Health and Human Performance. The purpose of this organization is to recognize academic achievement and to promote professional growth by sponsoring activities in the fields of physical education, kinesiology, family studies and health, and related areas.

Students shall qualify for membership at such times as they shall have attained junior standing in physical education, kinesiology, family studies, or community health, and have a minimum overall average of 3.5 and a minimum of 24 credits at the University of Maryland, College Park. For additional information, please contact the Student Service Center, 301-405-2357.

Special Resources and Opportunities

Gymkana Troupe

1120 HLHP Building, 301-405-2566
Director: Scott Welsh

For over 50 years, the University of Maryland Gymkana Troupe has been influencing young people to live healthy lifestyles. Founded at the University of Maryland College Park campus in 1946, the troupe has traveled throughout Maryland and neighboring states promoting drug-free living. Each of its 50+ members pledges themselves to be drug-free. Through their role-modeling and unique gymnastic performances, they have influenced hundreds of thousands of people to join them in living a drug-free life. The troupe, which is open to all University of Maryland students of all abilities, is considered a one-of-a-kind organization and is believed to be the only collegiate exhibitional gymnastic troupe actively touring the United States. One uniqueness of the Gymkana program is in its use of peer role models who share their experiences and their message of healthy living with others. Students influencing students to avoid drugs is the heart of Gymkana's program.

Research and Service Units

Center on Aging

2367 HLHP Building, 301-405-2469
Director and Professor: Dr. Laura B. Wilson
Associate Professor: Lori Simon-Rusinowitz

The Center on Aging stimulates and supports aging-related activities within existing departments, colleges, and schools throughout all of the various institutions of the University System of Maryland. The Center coordinates the Graduate Gerontology Certificate (master's and doctoral levels), the university's first approved graduate certificate program. The Center assists undergraduate and graduate students interested in the field of gerontology and helps them to devise educational programs to meet their goals. It is a research center working in health and aging policy, lifelong learning and civic engagement, disability and aging, behavioral and social aspects of aging, and health service delivery systems. It also conducts community education programs, assists faculty in pursuing research activities in the field of aging, conducts conferences on adulthood and aging-related topics, provides on- and off-campus technical assistance to practitioners who serve older adults and sponsors the University of Maryland Legacy College, Legacy Leadership Institutes, the University of Maryland Retirees Association, and Retired and Senior Volunteer Programs International (RSVPI).

For further information on any of the Center's activities call, write or visit the Center on Aging.

Course Code: HLHP

COLLEGE OF INFORMATION STUDIES

4105 Hornbake Building, 301-405-2033
E-mail: lbscgrad@deans.umd.edu
www.clis.umd.edu

Professor and Dean: Jennifer J. Preece

The College of Information Studies offers degree programs for individuals interested in careers in information services and management. At the master's level, students may specialize in several fields, including archival studies, geographic information systems, health information services, school library media services, and science and technology information systems. Graduates pursue careers in a wide range of information agencies and positions. The College has dual degree programs with the History Department, and Geography Department. The Master of Library Science degree is accredited by the American Library Association.

The Ph.D. degree prepares students for careers in research and teaching in the information field and in management of large information organizations.

While the College does not currently have an undergraduate major, it offers courses at the undergraduate level. These courses are suggested for students wishing to develop skills in locating, analyzing, and evaluating information and students seeking to learn more about career opportunities in the information field. The Master of Information Management degree program was initiated in 2003.

THE PHILIP MERRILL COLLEGE OF JOURNALISM (JOUR)

1117 Journalism Building, 301-405-2399
www.journalism.umd.edu

Professor and Dean: Thomas Kunkel
Acting Assistant Dean: Crane
Assistant Dean and Director of Undergraduate Programs: Reid
Assistant Dean for External Affairs: Quine
Assistant Dean Fiscal Affairs: Ringer
Professors: Beasley, Broder, Cleghorn, Franklin (Merrill Chair in Journalism), Gurevitch, Johnson (Knight Chair Journalism), Roberts, Stepp, Thornton (Richard Eaton Chair in Broadcast Journalism)
Associate Professors: Barkin, Hanson, McAdams, Moeller, Newhagen, Zanot
Emeriti: Blumer, Geraci, Hiebert, Holman, Martin
Assistant Professor: Bonner
Lecturers: Clayton, Crane, Flynn, Harvey, Katcef, Huffman, Rogers, Swift
Internship Director and Executive Director, American Association of Sunday and Feature Editors: Fuchs
Curator, Humphrey Journalism Fellows: Fleeson
Director of Casey Journalism Center for Children and Families: Frerking
Executive Director MSPA (Maryland Scholastic Pres. Assn.): Payne

Editor, American Journalism Review: Rieder
Director of the Knight Center for Specialized Journalism: Horner
Executive Director J-Lab: The Institute for Interactive Journalism: Schaffer
Assistant to the Dean and Director of Communication: Sheehan

The Philip Merrill College of Journalism is widely considered one of the best journalism programs in the nation, blending a mix of prize-winning journalists, communication scholars and nationally recognized professional programs. The school's mission is simple: to produce the best possible journalists for leading newspapers, magazines, TV, radio and online news outlets. Recent graduates are editors, reporters and producers at The New York Times, Washington Post, CBS, Los Angeles Times, CNN, America Online and many of the nation's other top news organizations.

Students learn from a faculty that includes Pulitzer Prize winners David S. Broder, Haynes Johnson and Jon Franklin, former CBS White House correspondent Lee Thornton and former Philadelphia Inquirer Executive Editor Gene Roberts. The faculty also include such internationally recognized media and communications scholars as Michael Gurevitch and Maurine Beasley.

Located less than 10 miles from the news capital of Washington, students participate in internships during the academic year at The Washington Post, The (Baltimore) Sun, CNN, and a wide array of Washington news bureaus. In the summer, students intern at top news organizations around the country. Broadcast news students produce and anchor a 30-minute nightly news show that reaches more than 400,000 households in suburban Washington on the College-operated UMTV station, and online students work on Maryland Newline, a political and public policy Web-based news magazine. Advanced broadcast, online, and print students enroll in Capital News Service, an intensive full-time reporting program in Washington and Annapolis. Students also participate in some of the school's many professional programs, including the monthly magazine American Journalism Review and the Casey Journalism Center for Children and Families.

Admission to the Philip Merrill College of Journalism

Freshman Admission and the 45-Credit Review

First-time entering freshmen will gain admission to the Philip Merrill College of Journalism directly from high school on an available basis. Early application is encouraged. Freshmen admitted to the program will have access to the necessary advising through their initial semesters to help them determine if Journalism is an appropriate area for their interests and abilities. Academic and career advising is provided to journalism students throughout their academic career by qualified academic counselors and the College's faculty.

Freshmen who are admitted directly to Journalism will be subject to a performance review by the time they have completed 45 credits. To meet the provisions of the review, these students must complete: (1) The two, first-year Fundamental Studies courses: ENGL 101 and mathematics; (2) at least nine credits of Distributive Studies coursework, selected in consultation with an advisor; (3) ENGL 101 and JOUR 201 with grades of C or higher (*JOUR 100 is a pre or co-requisite of JOUR 201*); and (4) a minimum cumulative GPA of 2.0. Students must prove grammar skills competency through attainment of a minimum of a 2.0 in JOUR 181 prior to enrolling in JOUR 201. Students who do not meet these requirements will not be allowed to continue in the LEP and will be required to select another major. *In addition freshmen are expected to complete JOUR 200 by the end of their first year.*

Transfer Admission

These requirements apply to new transfer students to the University as well as on-campus students.

Note: No more than 12 transfer credits of communications courses from an accredited journalism program may be approved by the College to be applied toward the degree. Transfer students who wish to receive credit for JOUR 201 based on work done in a non-accredited journalism program must pass a proficiency exam.

In order to be admitted to Journalism, transfer students will be required to meet the following set of gateway requirements: (1) The two, first-year Fundamental Studies courses: ENGL 101 and mathematics; (2) at least nine credits of Distributive Studies coursework, selected in consultation with an advisor; (3) completion of ENGL 101 and JOUR 201 with grades of C or higher. Enrollment in JOUR 201 requires proof of grammar skills competency through the attainment of at least a 2.0 in JOUR 181; and (4) attainment of a 2.8 GPA for all college-level work attempted.

The Test of Standard Written English (TSWE) was phased out at the end of the 2005-06 academic year. Students who failed to pass the TSWE (with a minimum score of 52 on their second attempt) prior to the end of the 2005-06 academic year are not eligible to take JOUR 181 to demonstrate grammar skills competency.

Appeals

Students who are unsuccessful in gaining admission to Journalism at the freshman or transfer level, and believe they have extenuating or special circumstances that should be considered, may appeal in writing to the Office of Undergraduate Admissions. The student will be notified in writing of the appeal decision.

Students admitted to Journalism as freshmen that do not pass the 45-credit review but believe they have special circumstances that should be considered, may appeal directly to the College.

For further information, contact The College's Student Services office at 301-405-2399.

Degrees

The Philip Merrill College of Journalism offers the B.A., M.A., M.J. and Ph.D. degrees.

Graduation Requirements:

Graduation requirements apply to all Journalism majors, including double-major and double-degree students.

Students are required to earn a minimum of 122 credits. Accrediting regulations require 80 credits of a student's course work be in areas other than mass communication (i.e. no COMM or JOUR courses.) A minimum of 65 of those 80 credits must be earned in liberal arts designated courses. A grade of C or better must be earned in JOUR 201 and JOUR 202/262 prior to taking courses for which they serve as prerequisites. Students must have a C average in their major.

A grade of C is required in JOUR 320 or 360 prior to enrolling in the supervised internship JOUR 399. Accrediting regulations also limit the number of experiential credits that can be applied toward a degree in Journalism. Prior approval must be obtained to receive degree credit for any experiential courses numbered 386 or 399 (repeatable up to 3 credits).

Students are also required to demonstrate abstract thinking skills. Majors are offered a language option, a mathematics option, or a combination of the two.

A supporting area consisting of four upper-level courses in a concentrated field is also required of Journalism majors. Students must also complete a minimum of 58 credits at the upper level of which no more than 28 can be journalism or mass communications credits. Finally, in addition to University graduation requirements, Journalism majors must complete additional liberal arts course work with one course each in economics, government and politics, American history, public speaking, and one course in anthropology, psychology or sociology.

Required courses for all Journalism majors, regardless of whether journalism is a student's primary or secondary major:

A. Non-journalism course requirements.

1. Abstract thinking skills requirement: Completion of a minimum of nine credits.
 - a. Three credits must be one statistics course from the following list: AREC 484, BIOM 301, BMGT 230, CCJS 200, CNEC 400 ECON 321, EDMS 451, GEOG 305/306, PSYC 200, SOCY 201, TEXT 400, URSP 350, or a more advanced statistics course.
 - b. A minimum of six credits through one or a combination of the following options. Should a student choose to combine the options, at least one language course must be at the intermediate level:
 - i. Language-any language skills course(s). Up to two courses with at least one course at the intermediate level and no more than one course at the introductory level. (High school equivalency does not satisfy this requirement.)
 - ii. Math and Computer Science - up to two courses:
 - a. Any mathematics (MATH) course numbered 111 or higher.
 - b. Any computer science (CMSC) course.
2. Public Speaking: one course from COMM 100, 107, 200, 230 or 250.

74 Letters and Sciences

3. History: one course from HIST 156, 157.
4. Behavioral or Social Science: ANTH 260; PSYC 100; SOCY 100 or 105.
5. Economics: ECON 200 or 201.
6. Government and Politics: GVPT 100 or 170
7. Supporting Area: Four upper-level (numbered 300 or higher) courses for a minimum of 12 credits in a supporting field (cannot be in Communication).

B. Journalism course requirements:

	Credit
JOUR 100 Professional Orientation	1
JOUR 200 History, Roles and Structures	3
JOUR 201 News Writing and Reporting	3
JOUR 202 News Editing	
or JOUR 262 News Editing for Broadcast	3
JOUR 300 Ethics	3
One of News Writing and Reporting II	3
JOUR 320 Print	
JOUR 360 Broadcast	
Advanced Skills:	9
Any nine JOUR hours numbered 321-389	
JOUR 350 Graphics or JOUR 352—Online	3
JOUR 399 Supervised Internship	1-3
JOUR 400 Law of Mass Communication	3
Journalism and Society: Any three-credit JOUR course	
numbered 410-469	3
Research: Any three-credit JOUR course numbered 470-479	3
Total Credits	38-40

Note: Students pursuing a broadcast track will be required to complete JOUR 361 pending campus approval.

Advising

The Office of Student Services, 1117 Journalism Building, 301-405-2399, provides academic advising to majors on an appointment basis. Send e-mail inquiries to jourug@deans.umd.edu.

Honors and Awards

Although no departmental honors program currently exists within the College, academically outstanding students are recognized through Kappa Tau Alpha, the Journalism academic honor society.

Hodding Carter III Community Service Award. Awarded at each May commencement to the journalism student exhibiting outstanding service to his or her peers, campus, and extended communities.

Sigma Delta Chi/Society of Professional Journalists Citation. Awarded annually to an outstanding journalism student.

Kappa Tau Alpha Citation. Awarded at each commencement to the journalism student earning the highest academic achievement for all undergraduate study.

College Park Scholars Media, Self & Society

CPS in Media, Self and Society – Director: Dr. Kalyani Chadha
Associate Director: Ken Joseph

Co-sponsored by the Philip Merrill College of Journalism, the Media, Self and Society Program is one of the living/learning programs offered by the College Park Scholars Program. This two-year program for incoming freshman is designed to give students the opportunity to undertake a critical examination of media organizations, institutions and practices as well as gain practical experience through involvement in a media-related activity of their choice.

For more information see College Park Scholars Program section in this catalog.

Field Work and Internship Opportunities

Supervised internships are essential. Penny Bender Fuchs is the Director of the Journalism Internship Program, 3118 Journalism Building, 301-314-2631.

The Annapolis and Washington bureaus of the Capital News Service are staffed by students and supervised by college instructors. Students cover state and legislative news for client papers around the region. Broadcast students have the opportunity to participate in Capital News Service in the Annapolis Bureau, developing stories and packages for UMTV. Students are required to report breaking news under deadline, write profiles, and cover state agencies. This is a full-time, semester-long program, on site at one of two bureau locations. Students interested in web journalism can report, write and edit for Maryland *Newsline*, an online magazine. This bureau is located in the College's online facility. Capital News Service is coordinated by Chris Harvey, Journalism Building, 301-314-2696.

For students interested in broadcast news, opportunities to gain experience with cable news programs are presented within the curriculum and by volunteering at the campus television station, UMTV. The campus radio station is WMUC. The Diamondback, the third most-read college paper in the nation, is the campus daily newspaper. Student newspapers of interest to special populations include the *Eclipse*, *Black Explosion*, and *Mitzpeh*.

Student Organizations

The college sponsors student chapters of the Society for Professional Journalists, the National Association of Black Journalists, and the Radio and Television News Directors' Association. These organizations provide students with opportunities to practice skills, establish social relationships with other students both on and off campus, and meet and work with professionals in the field.

For information on the organizations listed, contact the Student Services Office, 1117 Journalism Building, 301-405-2399.

Accreditation

The Philip Merrill College of Journalism became accredited in 1960 by the Accrediting Council on Education in Journalism and Mass Communications. Standards set by the council are generated from professional and academic ethics and principles. This accrediting body ensures the liberal arts foundation of a journalism curriculum, limiting professional and skills courses to one-third of a student's academic program.

Course Code: JOUR

Note: For coursework in Intercultural Communication, Mediated Communication, Negotiation and Conflict Management, Persuasion and Attitude Change, Political Communication, Public Relations and Rhetoric and Public Discourse see the Department of Communication in Chapter 7.

LETTERS AND SCIENCES (LTSC)

For information see Office of Undergraduate Studies.

SCHOOL OF PUBLIC POLICY (PUAF)

2101 Van Munching Hall, 301-405-6330
www.puaf.umd.edu
Professor and Dean: Steve Fetter

The School of Public Policy provides graduate-level, professional education to individuals interested in careers in public service. The core curriculum emphasizes economic and quantitative approaches to policy analysis, political institutions and processes, ethics and public sector finance. There are several specializations offered as part of four academic programs: international security and economic policy; management, finance and leadership; environmental policy; or social policy.

The School offers separate degrees for early-career and mid-career college graduates. Those with a minimum of five years' full-time professional experience in the policy process may seek the 36-credit Master of Public Management (M.P.M.) degree. Others may enroll in the 48-credit Master of Public Policy (M.P.P.) program which can be completed in two years by full-time students. Eligible students in the College of Behavioral and Social Sciences can enroll in a five-year BA/MPP program. The School also offers joint degree programs with the Smith School of Business (M.P.P./M.B.A.), the School of Law (M.P.P./J.D.), and the Graduate Program in Sustainable Development and Conservation Biology; and accepts a small number of Ph.D. candidates each year.

For further information, please check our website: www.puaf.umd.edu.

OFFICE OF UNDERGRADUATE STUDIES

2130 Mitchell Building, 301-405-9363
www.ugst.umd.edu

Associate Provost and Dean: Donna B. Hamilton
Associate Dean: Katherine McAdams
Associate Dean: Scott Wolpert
Assistant Dean: Lisa Kiely
Assistants to the Dean: James Newton, Laura Slavin

Through its many programs, the Office of Undergraduate Studies serves all undergraduate students at the University and the faculty and staff that support the undergraduate mission of the campus. The Office of Undergraduate Studies is the primary division at the University of Maryland responsible for leadership and oversight of undergraduate curricular and co-curricular education. The responsibilities of Undergraduate Studies include:

- Academic planning and policy
- CORE/General Education
- Enrollment management
- Academic advising
- Living-learning programs
- Academic enrichment experience programs
- Interdisciplinary and individual studies programs

Primary listings for programs that report to the Office of Undergraduate Studies appear in this section (except where noted).

Academic Achievement Programs

2110 Marie Mount Hall, 301-405-4736
Executive Director: Dr. Jerry L. Lewis
www.aap.umd.edu

The Academic Achievement Programs (AAP) primarily provides resources and opportunities for low-income individuals, first generation college students, disabled students and traditionally under-represented students. Academic Achievement Programs include the Intensive Educational Development (IED), and Educational Opportunity Center (EOC), the Ronald E. McNair Post-Baccalaureate Achievement Program, the Summer Transitional Program, and Student Support Services (SSS). EOC, McNair and SSS, which are part of the Federal TRIO program funded by the U.S. Department of Education, provide support services, to motivate and to prepare students from disadvantaged backgrounds for doctoral programs.

Educational Opportunity Center (EOC)

Mr. Andre Nottingham, Associate Director
301-429-5933

EOC is supported by a U.S. Department of Education grant primarily designed to assist adults 19 and over from low-income and first-generation backgrounds in pursuing post-secondary educational opportunities. UM-EOC predominantly serves inner-beltway communities in Prince George's County and provides academic and financial application assistance, counseling, and related services to its participants to improve post-secondary enrollment or re-enrollment.

Intensive Educational Development (IED)

Dr. Tilahun Beyene, Associate Director, AAP and Associate Director IED
301-405-4749

Funded by the State of Maryland, IED provides an array of comprehensive academic and tutorial services to first-year and second-year students who participate in the Summer Transitional Program (STP), first- and second-year eligible transfer students, and other eligible students enrolled in the general student body. Prospective students attempting to gain admission to the University by participating in this program are required to attend the six-week STP, designed to develop, expand and improve English, math, and study skills and assist in the transition from high school to the university. Continuing students are eligible for services as needed.

Summer Transitional Program (STP)

The Summer Transitional Program (STP) assists students in both their academic and personal adjustment to the University. Tutoring and skills enhancement in math, English, and college study strategies, coupled with enrollment in a selected three-credit university CORE course facilitate students' academic adjustment. In addition, students enroll in a one-credit orientation course and participate in weekly individual and/or group counseling sessions. The six-week STP is required of all students admitted to the University through SSS/IED.

Ronald E. McNair Post-Baccalaureate Achievement Program

Dr. Nthakoana Peko, Associate Director
301-405-4749

Designed principally for low-income, first-generation college juniors and seniors and/or students from underrepresented groups in specific graduate disciplines, the Ronald E. McNair Post-Baccalaureate Achievement Program is a federally funded research opportunity. The McNair program prepares students for graduate school, preferably at the doctoral level. The program offers assistance with the completion of graduate school and financial aid applications and preparation for graduate admissions tests. In addition, McNair offers a six-week summer research experience that affords students the opportunity to work intimately with faculty mentors on specific research projects, refine skills in written communications, computer applications, statistics and research methodology.

Student Support Services (SSS)

Dr. Alice N. Murray, Associate Director
301-405-4739

SSS is a U.S. Department of Education grant supported program geared toward low-income and first-generation college students. It works in conjunction with the IED Program. SSS provides academic and career advising, and tutoring to its students throughout their time at the university, with primary focus on first- and second-year students. It also provides financial aid application assistance, individual and group counseling, and leadership development workshops. In limited cases, SSS provides supplemental grant aid to eligible students in the program.

Asian American Studies (AAS)

1120 Cole Student Activities Building, 301-405-0996
Interim Director: Timothy J. Ng, Ph.D.
www.aast.umd.edu
aast@umd.edu

The Asian American Studies Program (AAS) provides students with the opportunity to study critically the experiences of Asian Americans. Through an interdisciplinary approach, students examine the histories, communities, and cultures of Asian Americans as both distinctive from and connected to the broader themes of diversity, ethnicity, race, gender, and migration in the Americas. AAS offers an undergraduate certificate for students who wish to develop a specialization in Asian American studies alongside their degree pursuits.

The AAS Certificate is a 21 credit-hour complementary study component. Students earn the Certificate by successfully completing required AAS courses, elective courses, and an AAS capstone. The Asian American Studies Program offers a variety of special topics courses each semester that may count towards elective requirements. Special topics courses have included Asian American Leadership, Asian American Public Policy, Asian American Literature, and Asian American Sexualities. Students may choose either the independent research option or the experiential learning option for the AAS capstone requirement. Courses taken toward the Certificate may be cross-listed in other departments and some may satisfy CORE requirements and electives.

Certificate Requirements:**A. AAS Core Courses (6 credits):**

1. Introduction to Asian American Studies (AAS 200)
2. Asian American History and Society (AAS 201)

B. Elective Courses (12 credits): Students may earn the 12 required elective credits by successfully completing any of a number of special topics courses AAS offers each semester. Elective requirements may also be satisfied through successful completion of courses offered through other departments or programs. Students must obtain approval from the AAS program director for courses outside of AAS offerings.

C. AAS Senior Capstone (3 credits): Students participate in a faculty-guided research project (AAS 388) or an experiential learning project such as an internship with an Asian American or Asian Pacific American organization (AAS 378).

D. All courses toward Certificate must be completed with minimum grade of "C." Students interested in earning the certificate should first schedule an advising appointment at the AAS office. Students in good standing may then officially enroll in the certificate program. While students may begin taking courses before they enroll in the certificate program, they should schedule an advising appointment as soon as possible.

76 Office of Undergraduate Studies

Air Force Reserve Officer Training Corps (AFROTC) Program

Aerospace Studies Program, 301-314-3242
2126 Cole Student Activities Building
Director: Colonel Ernie Haendschke
www.afrotc.umd.edu

The Air Force Reserve Officer Training Corps (AFROTC) provides students the opportunity to earn a commission as a second lieutenant in the United States Air Force while completing their undergraduate degree.

Four-Year Program

The four-year program is composed of a General Military Course (GMC) and the Professional Officer Course (POC). During the first two years, students participate in the GMC and receive an introduction to the Air Force and the various career fields. Students enrolled in the GMC program incur no obligation and may elect to discontinue the program at any time. The final two years (POC) concentrate on the development of leadership skills and the study of United States defense policy. Students must compete for acceptance into the POC. Students in the four-year program who successfully complete the first two years of the program and are accepted into the POC program must attend four weeks of field training at a designated Air Force base during the summer following their sophomore year of college.

Two-Year Program

The two-year program option is a special program offered to entering juniors in specific technical and non-technical majors. The academic requirements for this program are identical to the final two years of the four-year program. Additionally, students are eligible to receive the same benefits. During the summer following their junior year, all candidates must attend six weeks of field training at a designated Air Force base. Students should start the application process no later than the January prior to joining the cadet corps.

Scholarships and Incentives

AFROTC scholarship programs provide anywhere between one-half, to three and a half-year scholarships to in-college students on a competitive basis. Scholarships are available in many fields. Scholarship recipients receive tuition, lab expenses, incidental fees, book allowance (currently \$600), and a non-taxable monthly allowance of a minimum of \$250 up to \$400 as a senior. All POCs are eligible for the monthly allowance. Any student accepted by the University of Maryland may apply for these scholarships. AFROTC membership is required to receive an AFROTC scholarship.

Army Reserve Officer Training Corps (ROTC) Program

1150 Cole Student Activities Building, 301-314-9238
Director: Lieutenant Colonel Dennis McFadden
www.armyrotc.umd.edu

The Army Reserve Officer Training Corps offers students the opportunity to earn a commission as a Second Lieutenant in the United States Army (Active, Reserve, or National Guard) while completing their undergraduate degree.

Four-Year Program

The four-year program is composed of the Basic Leadership Course and the Advance Leadership Course. The first two years (Basic Course) consists of a general introduction to military customs and courtesies, soldier skills, communication skills, personal development, and introductory leadership skills. Students enrolled in the basic course incur no obligation and may discontinue the program at any time. In the final two years (Advanced Course), students concentrate on developing leadership skills in organizations. Students must have permission of the Director of Army ROTC to enroll in the advanced course. The Advanced Course requires five weeks of field training at Fort Lewis, Washington the summer after their junior year.

Two-Year Program

The two-year program is available to students with two years and a summer remaining in their university studies. The academic requirements for this program are identical to the Advanced Course in the four-year program, and students are eligible to receive the same benefits. During the summer preceding the junior year, students must attend five weeks of field training at Fort Knox, Kentucky. Students should start the application process for this option no later than January of their sophomore year.

Scholarships and Incentives

Army ROTC Scholarships are available for four, three or two years on a competitive basis. The scholarships are based solely on merit—not financial need. Those selected receive tuition and mandatory fees, a book allowance, and a non-taxable monthly allowance ranging from \$350-\$500 based on academic year.

Curriculum

Basic Leadership Course
Freshman Year: ARMY 101 (fall) ARMY102 (Spring)
Sophomore Year: ARMY 201 (Fall) ARMY 202 (Spring)

Advanced Leadership Course
Junior Year: ARMY 301 (Fall) ARMY 302 (Spring)
Senior Year: ARMY 401 (Fall) ARMY 302 (Spring)

All Army ROTC courses are open to any university student for credit whether or not he or she is enrolled as a cadet in the Army ROTC program.

Beyond the Classroom

South Campus Commons, 301-314-6621
Interim Director: Lisa Kiely
www.btc.umd.edu

Beyond the Classroom (BTC) is a living-learning program dedicated to preparing students for internships or service learning experiences in local governments or small non-profit organizations. The mission of BTC is to foster a community of students by enhancing professional preparation and cultivating civic engagement in individuals as they prepare to leave college and enter the workforce or begin graduate school. Students develop a professional portfolio in writing and oral communication skills. BTC is a two-semester program open to all students.

Center for Teaching Excellence

0405 Marie Mount Hall, 301-405-9356
Director: Spencer Benson
www.cte.umd.edu

The Center for Teaching Excellence supports departmental, individual and campus-wide efforts to enhance teaching and learning at the University of Maryland. The Center offers assistance to departments, faculty, graduate and undergraduate teaching assistants. The Center provides workshops, teaching assistant development, evaluation and support strategies for improving teaching and learning, individual consultations for faculty and graduate students, research on current teaching practices, and implementation of innovative teaching and learning strategies.

The Center also administers the Undergraduate Teaching Assistants program, a University-wide teaching and learning program for graduate teaching assistants, the Lilly Teaching Fellows program, the Instructional Improvement Grants program, and various Scholarship of Teaching and Learning programs.

College Gateway Programs

Director: Shirley H. Morman
3103 Turner Hall, 301-314-7763
Educational Talent Search: www.etsp.umd.edu
ProjectLINKS: www.projectlinks.umd.edu

Educational Talent Search

Educational Talent Search, a discretionary early intervention grant funded by the U.S. Department of Education, increases the college participation of low-income and first-generation college students by creating an academic pipeline from middle school to high school to baccalaureate study. Authorized by the Higher Education Act of 1965, Talent Search identifies needy students and helps them take advantage of the Educational Opportunity Grant Program, now known to as the Pell Grant. Based at and sponsored by the University since 1985, Talent Search identifies youth of extreme financial or cultural need with an "exceptional potential" for postsecondary education and encourages them to complete secondary school and undertake further education. It also publicizes the availability of student financial aid and encourages secondary school or college dropouts to reenter educational programs. Talent Search supplements other pre-college counseling and academic enrichment services. Program-based Talent Search Advisors work through selected Maryland schools, providing students from 6th-12th grades with a variety of services and information. The Talent Search Program also refers families to the Upward Bound Program and Upward Bound Math/Science Initiative Program for academic development and comprehensive counseling services.

ProjectLINKS

ProjectLINKS (linking information networks and knowledge to students), a distant education-distant learning pilot program, features homework support through an innovative online tutoring model for middle-school students. Through its summer academic enrichment programs, available only to Educational Talent Search program participants, ProjectLINKS offers resources in educational software, study skills, strategies for test taking and PSAT/SAT preparation. ProjectLINKS uses an instructional system that combines assessment and skills development focused on performance and instructional strategies that encourage students to work at their own level and pace.

College Park Scholars Program (CPSP)

1125 Cumberland Hall, 301-314-CPSP (2777)

Executive Director: Greig Stewart

www.scholars.umd.edu

College Park Scholars is a multi-disciplinary, two-year living/learning program in which academically and creatively talented freshmen and sophomores explore interests that enhance or complement their choice of academic major. Upon successful completion of the selected program, students receive a College Park Scholars citation on their transcript. Course requirements for the citations vary by program; visit the Scholars website for details: www.scholars.umd.edu.

Innovative curricula plus public service, civic engagement and team projects, help prepare students for research and internship opportunities. Scholars may also apply to departmental or college honors programs in their junior year.

Admission to College Park Scholars is selective and by invitation. Upon invitation to Scholars, students indicate their preference from the following programs:

Advocates for Children
American Cultures
Arts
Business, Society, and the Economy
Earth, Life, and Time
Environmental Studies

International Studies
Chemical and Life Sciences
Media, Self, and Society
Public Leadership
Science, Discovery, and the Universe
Science, Technology, and Society

Students in each program attend weekly, faculty-led colloquia that encourage active discussion and debate. Other courses in the curriculum may be selected to satisfy general education (CORE) requirements. In the second semester of their sophomore year, students choose from independent research, service-learning projects, or internships both on and off campus for their Scholars' capstone experience.

The Program's focus on community offers many advantages. Program faculty maintain offices in Cambridge Community residence halls; this facilitates meeting with students. Several program faculty lead study-abroad experiences between the fall and spring semesters, or during the summer. Shared interests, classes, and residence halls help students to form study groups. Scholars also enjoy meeting guest speakers and having the opportunity to continue conversations outside the classroom. Program directors encourage students to pursue leadership opportunities in co-curricular activities, design and implement community service and social events, participate in recruitment activities, or serve on the Student Advisory Board.

For more information on any of the programs identified above, write to:

Executive Director, College Park Scholars
1125 Cumberland Hall, University of Maryland,
College Park, MD 20742-9331
301-314-2777

CORE Liberal Arts and Sciences Studies Program (General Education Requirements)

Office of the Associate Provost for Academic Affairs and Dean for Undergraduate Studies

2130 Mitchell Building, 301-405-9359

Director CORE Planning and Implementation: Laura Slavin

www.ugst.umd.edu/core

To earn a baccalaureate at the University of Maryland all students complete both a major course of study and a campus-wide general education program.

For more information, see Chapter 5: General Education Requirements.

Division of Letters and Sciences

1117 Hornbake Library

Interim Director: John Bowman

General Advising: 301-314-8418 or 8419

Pre-Professional Advising: 301-405-2793

Credit-By-Exam: 301-405-2793

www.ltsc.umd.edu

Letters and Sciences is the academic home for students exploring a variety of fields before selecting a major, for post-baccalaureate students taking additional course work, and for non-degree seeking students taking undergraduate courses. Letters and Sciences may also serve as the academic home for students completing requirements for entry into a Limited Enrollment Program. Letters and Sciences advisors help students to select and schedule courses, plan academic programs, and learn about campus-wide resources. Letters and Sciences collaborates closely with college advising offices, academic departments, and programs across campus and provides a coordinated advising network that features:

Choosing a Major

Letters and Sciences students receive information about and referral to a wide range of academic programs and services including specialized workshop sessions. Letters and Sciences staff specialize in assisting students develop strategies and plans for entering Limited Enrollment Programs.

Markets and Society

Markets and Society is a by-invitation program for entering freshmen interested in exploring the world of business. The Markets and Society Program helps students to learn about the field of business, refine their career goals, and interact with other students who share their interests.

Learning Communities

Learning Community programs in the Division of Letters and Sciences focus on first-year students. They combine a one-credit seminar called "Introduction to the University" with one or more general education (CORE) courses. The seminars facilitate major and career exploration.

Interim Advising Program

Newly admitted transfer students with more than 60 credits, who were unsuccessful in gaining admission to a Limited Enrollment Program, receive advising and assistance from a Letters and Sciences professional staff member during their first semester on campus. For this group of students, the University waives the requirement that all students must declare a major by 60 credits.

Pre-Professional Advising

Letters and Sciences offers specialized advising for students interested in law and the health professions. For further information, see the section on "Pre-Professional Advising and Programs" in this catalog and visit www.ltsc.umd.edu/lawhealth.html

Global Communities

Director: Kirsten Dabelko

International Education Service

3116 Mitchell Building, 301-314-7100

Office: 0119 Dorchester Hall

www.globalcommunities.umd.edu

Global Communities provides undergraduate international and U.S. students with a living-learning environment that enhances their knowledge of the world, its cultures and people, along with complementing their academic studies. Diversity knows no borders, and an increasingly complex global society makes it imperative for students from all disciplines to learn intercultural skills in order to work and live in this new society. The program seeks to: create an awareness of cultural differences; develop the communication skills, which facilitate intercultural exchanges; understand varied cultural values and the expression of those values in diverse societies; and explore one's own culturally constructed identity. Dorchester Hall, where roommates often come from different cultures, offers a unique international environment where Global Communities students have an opportunity to apply immediately what they learn in the classroom to actual intercultural interaction in their residential experience.

78 Office of Undergraduate Studies

Individual Studies Program (IVSP)

1117 Hornbake Library, 301-314-9962
IVSP Coordinator: Jeff Kniple
www.ivsp.umd.edu

The Individual Studies Program (IVSP) is a degree-granting academic program under the direction of the Office of Undergraduate Studies. The program allows students to create new interdisciplinary curricula leading to the Bachelor of Arts or Bachelor of Science degree. Students draw primarily from the University of Maryland's course offerings to form an academic concentration not otherwise available to them at the institution. A written prospectus that defines the student's major and outlines the curriculum is required to apply to the program.

Students must seek the guidance and approval of a faculty mentor prior to having their prospectus reviewed by the Individual Studies Faculty Review Board. If approved, the courses agreed upon by the Faculty Review Board become the basis for the student's major requirements. These listed requirements from numerous academic departments, along with the CORE general education requirements, are analogous in most ways to the academic requirements given to students who select from the University's traditional majors. However, each student is required to design a unique program of study and defend it in order to be a part of IVSP.

Individual Studies students must complete a senior project and are encouraged to use internships or independent studies with faculty to supplement their work in the classroom. While IVSP programs are never vocational in nature, drawing from real-life experience as a supplement to the academic curriculum is generally encouraged. These projects often serve as a way for the students to develop academic connections among the multiple disciplines involved in their programs.

While IVSP gives students the opportunity to create a unique academic program focused on a specific area of study, using courses from multiple academic departments, it does not substitute for or replicate the educational goals of existing University programs, including the Limited Enrollment Programs (LEPs). IVSP programs may not include substantial numbers of courses from LEP departments.

Developing a successful IVSP prospectus takes time and usually involves several meetings to review and edit the draft prospectus. Interested students should contact the IVSP Coordinator and begin the application process early in their academic career. Working closely with the Coordinator and their prospective faculty mentor, students should plan to complete and submit their IVSP prospectus, preferably during their sophomore year, or in their junior year, before reaching 90 credits.

To be admitted into the Individual Studies Program the student must:

1. Have a clearly defined academic goal that cannot be reasonably satisfied in an existing curriculum at the University of Maryland, College Park.
2. Have at least 30 earned college credits with at least 12 credits completed at College Park.
3. Have a minimum of a 2.5 GPA in each of their previous two semesters of college, and at least a 2.0 GPA overall.
4. Complete at least 30 additional credits beginning the term following admission to IVSP.
5. Identify an appropriate faculty mentor, preferably tenured or tenure track, with significant undergraduate education experience related to the field of study.
6. Complete a detailed plan of study (prospectus) which is approved by their faculty mentor and then approved by the Individual Studies Faculty Review Board. This proposal will include:
 - a. A clear statement of the central academic purpose for their major.
 - b. Specific course requirements including at least 27 credits of upper-division major coursework (300 & 400 level) beyond the IVSP courses: IVSP 317, IVSP 318, and IVSP 420.
 - c. The list of courses must include at least one writing-craft course, in addition to the CORE Fundamental Studies Introduction to Writing and Professional Writing requirements, selected from an approved list that is available from the Individual Studies staff.
 - d. A semester-by-semester plan for the completion of their undergraduate degree within a reasonable period of time.
7. Complete the IVSP Departmental Notification Form in order to notify academic units from which they will take three or more 300-400 level courses.

Following admission, students must:

1. Earn a grade of C or better in all courses required in their IVSP program of study including IVSP 420, and a satisfactory grade in IVSP 317.
2. Complete mandatory advising sessions with their faculty mentor and the IVSP staff every semester, including a review of their semester-by-semester academic plan for completion of their IVSP program.
3. If not already completed, work towards immediate completion of the fundamental studies requirements for English composition and mathematics.

For more information, please visit the IVSP website at www.ivsp.umd.edu/ or contact Jeff Kniple, IVSP Coordinator at 1117 Hornbake Library, 301-314-9962.

Lesbian, Gay, Bisexual and Transgender Studies (LGBT)

1147 Tawes Fine Arts Building, 301-405-5428
Director: Dr. Marilee Lindemann
www.lgbts.umd.edu

The Program in Lesbian, Gay, Bisexual and Transgender Studies (LGBT) offers an interdisciplinary undergraduate certificate designed to examine the lives, experiences, identities and representations of LGBT persons, those who are today described as having a minority sexual orientation or who are gender transgressive. Students study LGBT families and communities, cultures and subcultures; histories, institutions, languages and literatures; economic and political lives; and the complex relations of sexual minorities to the culture and experience of the gender conformant and (hetero)sexual majority. LGBT Studies is an interdisciplinary and multidisciplinary field, and promotes the application of new theories and methodologies (e.g., queer, feminist, critical race, and multicultural theories) to established disciplines, and it advances the generation of new knowledge within traditional fields of scholarship. Through study of sexual minorities, students gain an understanding of and respect for other differences in human lives such as age, ability, class, ethnicity, gender, race, and religion. With their faculty advisors, certificate candidates design a program that complements their major field of study.

Certificate Requirements:

- A. Core curriculum for the LGBT Certificate (15 credits)
 1. LGBT200 Introduction to Lesbian Gay Bisexual Transgender Studies
 2. One of the following:
 - a. CMLT291/LGBT 291
International Perspectives on Lesbian and Gay Studies
 - b. ENGL265/LGBT 265
Introduction to Lesbian, Gay, and Bisexual Literature
 3. One of the following:
 - a. LGBT 350
People and Communication
 - b. PHIL407/LGBT 407
Gay and Lesbian Philosophy
 - c. WMST494/LGBT 494
Lesbian Communities and Differences
 4. One of the following:
 - a. ENGL359/LGBT 359
Special Topics in Lesbian, Gay, and Bisexual Literatures
 - b. ENGL459/LGBT 459
Selected Topics in Sexuality and Literature
 - c. ENGL465/LGBT 465
Theories of Sexuality and Literature
 5. One of the following:
 - a. LGBT488
Seminar in LGBT Studies
 - b. LGBT386
Supervised Internship - LGBT Community Organizations
- B. Electives (6 credits)

Students choose 6 hours of elective credits in consultation with their advisor in LGBT Studies. At least 3 hours of elective credits must be from upper division courses (i.e., those numbered 300 or above). Students are encouraged to choose electives to complement their knowledge of LGBT people and issues by exploring disciplines that contrast with the major field of study. Students may select elective courses from the list of core

courses above or from a list of approved courses. A student may also petition to have any other course fulfill this requirement by providing evidence, usually the syllabus, that a substantial amount of the course work, usually including a term paper, consists of LGBT material.

C. Each student must obtain a grade of C or better in each course that is to be counted toward the certificate.

Maryland Center for Undergraduate Research (MCUR)

McKeldin Library, 301-314-6786
Director: Lisa Kiely
www.ugresearch.umd.edu

The Maryland Center for Undergraduate Research (MCUR) is an initiative from the Office of the Dean of Undergraduate Studies. Created as a resource for faculty and students, the Center serves as a clearinghouse for both on-campus and off-campus research opportunities for undergraduate students. Additionally, faculty members can share different models for incorporating undergraduate students into research programs, and ways of infusing undergraduate research into the curriculum.

Among the programs at the MCUR are the Undergraduate Research Assistant Program (URAP) and the Senior Summer Scholars (SSS). URAP provides an opportunity for students to work with faculty mentors on ongoing research projects. Experienced students who are rising seniors are encouraged to apply for funding through the Senior Summer Scholars program for summer study with a faculty member. Students new to research as well as students with previous research experience participate in this program.

National Scholarships Office

0104 Armory, 301-314-1289
Coordinator: Dr. Camille Stillwell
www.scholarships.umd.edu

The National Scholarships Office (NSO) is committed to helping eligible University of Maryland students identify, apply for, and win national scholarships and fellowships. The process of preparing an application for a scholarship or fellowship requires careful thought and preparation through each step of the process. Resources available through the NSO provide information and advising on the many national scholarships and fellowships.

The National Scholarships Office assists in the preparation of national scholarship applications including guidance on writing a personal statement, selecting faculty members to write letters of recommendation, and participating in mock interviews to help students prepare for personal interviews that are often a part of the application process.

Orientation

1102 Cole Field House, 301-314-8217
Director: Gerry Strumpf
www.orientation.umd.edu

The goal of Orientation is to introduce new students to the University of Maryland community. The Orientation Office offers a wide range of transitional programming and services for students and their families as they prepare to attend the University of Maryland.

New Student Orientation

Held prior to the semester a student enrolls at the University of Maryland, new student orientation for first-time freshman normally covers two days; orientation for new transfer students covers one day. During new student orientation, individuals meet with representatives from their academic college for advising and course scheduling. Undergraduate Orientation Advisors, introduce students to academic and student life at the University of Maryland, including student campus services and resources, and opportunities for involvement on campus.

Parent Orientation

Parents of new University of Maryland students are strongly encouraged to attend a one-day program specifically designed to introduce them to the academic, social, and cultural opportunities of the university and to better prepare them for the issues that are likely to affect their son or daughter throughout their matriculation at the University.

Faculty Forays

Faculty Forays focus on the continuing transition of parents. Offered to parents on the second day of freshman orientation, these one-day programs combine a trip to an area attraction with connections to other parents and a campus faculty or staff host.

Introduction to the University Seminars

The Orientation Office coordinates new student seminar courses, UNIV 100 and 101. These courses introduce students to the world of higher education and, more specifically, to the University of Maryland. Course topics include career/major exploration, successful studying and test-taking strategies, diversity, and involvement within the university.

Pre-College Programs

1101 West Education Annex
Executive Director: Georgette Hardy DeJesus
www.precollege.umd.edu

Upward Bound Program, 301-405-6776
Upward Bound-Higher-Educational Opportunities for Latino Achievers (UB-HOLA), 301-405-6776
Upward Bound-Math and Science Regional Center (UB-MSRC), 301-405-1773

The University of Maryland Pre-College Programs in Undergraduate Studies is comprised of the following federally and state funded programs:

The classic Upward Bound Program (UB)
Upward Bound-Higher-educational Opportunities for Latino Achievers (UB-HOLA)
Upward Bound-Math and Science Regional Center (UB-MSRC).

These programs generate the skills and motivation necessary for success in post-secondary education. They immerse high school participants in rigorous academic instruction, tutoring, counseling, and innovative educational experiences throughout the school year and during the six-week summer residential program. Pre-College Programs are part of the Federal TRIO Programs that provide educational opportunity outreach programs designed to motivate and support students from disadvantaged backgrounds.

The UB Programs are open to low-income and/or first-generation college bound high school students in grades 9 through 12, who demonstrate an academic need and want to pursue a four-year postsecondary education. Eligible students must attend target high schools in Prince George's and Montgomery Counties. High school principals, teachers, and counselors recommend students to the program.

Eligibility for HOLA Upward Bound requires that students attend Montgomery Blair, Wheaton, Richard Montgomery, High Point, or Bladensburg high schools.

The UB-MSRC is open to students in grades 10 through 12, who demonstrate an academic need and want to pursue post-secondary education programs in fields related to mathematics and science. UB-MSRC recruits high school students from Delaware, Maryland, Pennsylvania, Virginia, West Virginia, and the District of Columbia.

University Honors Program

Anne Arundel Hall, 301-405-6771
Director: Dr. Barbara L. Thorne
www.honors.umd.edu

The University Honors Program offers special educational opportunities and resources to students with exceptional academic talents. Honors students combine Honors course work with studies in their majors and elective courses to deepen their total educational experience. They broaden their intellectual horizons by selecting Honors (HONR) seminars and Honors versions of regular courses. Honors seminars offer small class size (capped at 20 students), academic experiences characterized by active participation, intensive writing, and outstanding faculty who encourage critical thinking and innovation. Most Honors seminars fulfill CORE (general education) requirements.

Students in the University Honors Program may earn an Honors Citation by earning 16 credits: 15 credits of Honors courses (at least nine of which must be in HONR courses) and a one-credit colloquium (either HONR 100 or HONR 200) and by maintaining an overall 3.2 GPA. Anne Arundel Hall, the Honors Living/Learning Center, houses 100 Honors students, the program offices, a scholar-in-residence, a computer lab, the Portz Library, seminar rooms, and lounges. Honors students also live and study together in Queen Anne's, Denton, Easton, and Ellicott Halls; many upperclassmen enjoy apartment-style housing in South Campus Commons.

80 Office of Undergraduate Studies

Outstanding first-year entering students apply to the University through the normal process and receive invitations into the University Honors Program; transfer students with between 12 and 30 credits (excluding AP credits) may apply for admission to Honors. Honors Humanities (www.honorshumanities.umd.edu/) and Gemstone (www.gemstone.umd.edu/) are more specialized programs within University Honors; they are described under their own headings in this catalog. In addition to the University Honors Program, about 40 departments or colleges offer advanced, discipline-based Honors programs that provide enriched opportunities, typically involving work with faculty mentors on independent research projects. Most departmental and college Honors programs begin in the junior year; please contact them directly for the admission requirements.