



DEPARTMENT OF ENGLISH

Dr. Mark Smith, Head
Room 207, West Hall

The Department of English offers four programs of study that lead to a B. A. degree in English and two programs that lead to an M. A. degree in English. The Department also offers minors in Literature and Language, Journalism, Creative Writing and Contemporary Literature, and Professional Writing.

The programs in the English Department build upon the basic knowledge, skills, and values provided by the University Core Curriculum while preparing students for a wide range of careers as well as for graduate study in numerous fields. The Literature and Language Track provides a pre-law and pre-theology education as well as prepares students for graduate study in English. The Journalism Track prepares students for careers in print journalism, editing, and in-house news writing. The Creative Writing and Contemporary Literature Track prepares students for graduate study as well as careers in publishing and related fields. The Professional Writing Track also prepares students for graduate study as well as careers in law, business, advertising, and publishing. Students in every track are encouraged to gain work experience related to their major through internships or the VSU Cooperative Education Program. Each of the English Department's tracks emphasizes the importance of critical thinking skills; encourages an appreciation of diverse cultural perspectives; and develops a greater understanding of the cognitive, emotive, and aesthetic dimensions of language as an avenue of self-knowledge, cultural understanding, and social responsibility.

Each program in the English Department has numerous desired outcomes. Examples of these outcomes include the following:

BACHELOR OF ARTS DEGREE WITH A MAJOR IN ENGLISH

Selected Educational Outcomes

1. To develop a basic knowledge of British, American, and world literatures and an ability to respond to them critically.
2. To write and speak with clarity, precision, and sophistication.
3. To research carefully and systematically, utilizing the appropriate computer technology, and to apply that research to the study of language and literature.
4. To foster a greater understanding of the cultural and historical contexts of written communication.

Requirements for the Bachelor of Arts with a Major in English

Core Curriculum Areas A-E* (See VSU Core Curriculum) **42 hours**

Core Curriculum Area F* **18 hours**

ENGL 2060, ENGL 2080 6 hours

ENGL 2110, 2120, or 2130 3 hours

(Student may choose one of the above courses
not taken in Area C.)

Foreign Language and Culture through 2002 6-9 hours

(3 hours will count in Area C if student begins
foreign language classwork at 1001 level.)

ART 1100, COMM 1100, MUSC 1100, THEA 1100, HIST 1011,
HIST 1012, HIST 1013, PHIL 2010, PHIL 2020 0-6 hours

* All core classes with an ENGL prefix (ENGL 1101, ENGL 1102,
ENGL 2060, ENGL 2080, ENGL 2110, ENGL 2120, ENGL 2130,
and ENGL 2140) must be completed with a grade of "C" or better.

Literature and Language Track

Senior College Curriculum **60 hours**

Courses required for the Major 39 hours

ENGL 3110, ENGL 3120, ENGL 3210, ENGL 3215 12 hours

ENGL 3060 3 hours

(prerequisite or corequisite to all 4000-level courses)

One British period course (ENGL 4110-4160) 3 hours

One American period course (ENGL 4210-4250) 3 hours

One critical focus course 3 hours

(ENGL 4310, 4320, 4330, 4340, or 4350)

Four elective courses of 3 hours each at the 3000-level

or above from ENGL, CWCL, JOUR, or LING

(One of these courses must be ENGL 3010, 3020,

3030, 4600, 4610, 4620, 4630, 4640, or any course

with a CWCL, JOUR, or LING prefix.)

(One foreign language literature course numbered

4000 or above may be substituted.) 12 hours

ENGL 4900 Senior Seminar 3 hours

Minor and/or Elective courses 21 hours

Must include at least 6 hours of courses numbered

3000 or above in a single discipline outside of ENGL.

Total hours required for the degree **120 semester hours**

Or

Journalism Track–Newspaper Emphasis

Senior College Curriculum **60 hours**

Courses Required for the Major 40-41 hours

ENGL 3110 or ENGL 3120 3 hours

ENGL 3210 or ENGL 3215 3 hours

| | |
|---------------------------------------|------------|
| JOUR 3080, JOUR 3510, JOUR 3540 | 9 hours |
| JOUR 3570, JOUR 4500, CWCL 3400 | 9 hours |
| JOUR 3520 | 1-2 hours* |
| JOUR 2500 and/or JOUR 4800 | 3 hours |
| JOUR 4510 or JOUR 4540 | 3 hours |
| JOUR 4520 or JOUR 4560 | 3 hours |
| JOUR 4550 | 3 hours |
| ENGL 4900 | 3 hours |

* English majors not pursuing cross-training certificate must take course for 2 hours to ensure exposure to skills for multimedia presentation

Minor and/or elective courses 19-20 hours

Must include at least 6 hours of courses numbered

3000 or above in a single discipline outside of JOUR.

Total hours required for the degree 120 semester hours

Or

Journalism Track–Magazine Emphasis

Senior College Curriculum 60 hours

Courses Required for the Major 40-41 hours

ENGL 3110 or ENGL 3120 3 hours

ENGL 3210 or ENGL 3215 3 hours

JOUR 3080, JOUR 3510, JOUR 3540 9 hours

JOUR 3570, JOUR 4500, CWCL 3400 9 hours

JOUR 3520 1-2 hours*

JOUR 2500 and/or JOUR 4800 3 hours

JOUR 4510 or JOUR 4560 3 hours

JOUR 4520 or CWCL 3420 3 hours

JOUR 3560 3 hours

ENGL 4900 3 hours

* English majors not pursuing cross-training certificate must take course for 2 hours to ensure exposure to skills for multimedia presentation

Minor and/or elective courses 19-20 hours

Must include at least 6 hours of courses numbered

3000 or above in a single discipline outside of JOUR.

Total hours required for the degree 120 semester hours

Or

Professional Writing Track

Senior College Curriculum 60 hours

Courses required for the Major 39 hours

ENGL 3110 or ENGL 3120 3 hours

ENGL 3210 or ENGL 3215 3 hours

ENGL 3010, ENGL 3020, JOUR 4500 9 hours

JOUR 3560 or JOUR 4510 3 hours

CWCL 3400, CWCL 3420 6 hours

ENGL 4600, ENGL 4620, ENGL 4630 9 hours

ENGL 4640, ENGL 4900 6 hours

Minor and/or Elective Courses 21 hours

Must include at least 6 hours of courses numbered
3000 or above in a single discipline outside of ENGL.

Total hours required for the degree 120 semester hours

Or

Creative Writing and Contemporary Literature Track

Senior College Curriculum 60 hours

Courses required for the Major 40 hours

ENGL 3110, ENGL 3120 6 hours

ENGL 3210, ENGL 3215 6 hours

ENGL 3060 3 hours

(prerequisite or corequisite to all 4000-level courses)

ENGL 4150 or ENGL 4160 3 hours

ENGL 4240 or ENGL 4250 3 hours

One 4000-level ENGL course 3 hours

CWCL 2500 1 hour

CWCL 3400 3 hours

One three-course CWCL sequence 9 hours

CWCL 3440, CWCL 4440, CWCL 4410; or

CWCL 3460, CWCL 4460, CWCL 4420; or

CWCL 3420, JOUR 4520 or JOUR 3560, CWCL 4430

ENGL 4900 3 hours

Minor and/or Elective courses 20 hours

Must include at least 6 hours of courses numbered

3000 or above in a single discipline outside CWCL.

Total hours required for the degree 120 semester hours

Students should review the Arts and Sciences requirements for completion of the B.A. degree.

The English Department assesses the extent to which its program requirements create the desired outcomes by using a variety of techniques. Examples of these assessments (and the related educational outcome) include the following.

Examples of Outcome Assessments

1. Students will submit a portfolio of written work.
2. Students will take a 100-item test of basic knowledge in a capstone course, ENGL 4900.
3. Students will complete a five-page Undergraduate English Major Exit Questionnaire.

**Institutional Cross-training Certificate
for Journalism and Mass Media Students**

To earn an institutional certificate, students who are earning a minor in print journalism or who are majoring in English with a journalism emphasis will be required to pass the following courses with a grade of “C” or better:

- MDIA 3050 Broadcast Performance and Announcing
- MDIA 3500 Broadcast News Writing
- MDIA 4960 (1-2 hrs) Performance and Production Workshop

To earn a institutional certificate, students who are earning a minor or major in mass media will be required to pass the following courses with a grade of “C” or better:

- JOUR 3510 News Writing
- JOUR 3520 (1 hr) Essential Reporting Skills
- JOUR 4510 or 4520 or 4550 Feature Writing, Literary Journalism, Reporting

Minor in Creative Writing and Contemporary Literature 15 hours

- CWCL 3400 3 hours
- One two-course CWCL sequence: 6 hours
 - Chosen from CWCL 3440 and CWCL 4440
 - CWCL 3460 and CWCL 4460
 - CWCL 3420 and JOUR 4520 or JOUR 3560
- Two ENGL electives at the 3000- or 4000-level 6 hours

Minor in Literature and Language 15-18 hours

- ENGL 2060 (if not taken in Area F) 0-3 hours
- ENGL 3110, ENGL 3120, ENGL 3210, ENGL 3215 12 hours
- Elective numbered 3000 or above 3 hours
 - from ENGL, CWCL, JOUR, or LING

Minor in Journalism 18 hours

- JOUR 3080 3 hours
- JOUR 3510, JOUR 3540, JOUR 3570, JOUR 4500 12 hours
- One elective from the following list: 3 hours
 - JOUR 4510, JOUR 4520, JOUR 4540,
 - JOUR 4550, or JOUR 4560

Minor in Professional Writing 18 hours

- ENGL 3010, ENGL 3020, ENGL 4600, ENGL 4630 12 hours
- Two sequenced electives from the following list 6 hours
 - ENGL 4620 and ENGL 4640 or
 - JOUR 3560 and JOUR 4510 or
 - CWCL 3400 and CWCL 3420



**ENGLISH TO SPEAKERS OF OTHER
LANGUAGES (ESOL) ENDORSEMENT**

Dr. Mark Smith, Head, Department of English
Room 207, West Hall

Dr. Victoria Soady, Head, Department of
Modern and Classical Languages
Room 128, West Hall

The English to Speakers of Other Languages (ESOL) Endorsement provides credentials to teach English as a second language in Georgia. An ESOL endorsement can be pursued by undergraduate or graduate students working toward or possessing certification in any teaching field or in the service field of communication disorders (speech and language pathology). An individual in any other service field or in the leadership field must have established a teaching field in order to pursue the ESOL endorsement. An individual with a permit in foreign language is also eligible to add the ESOL endorsement.

Requirements for the ESOL Endorsement

| | |
|---|---------|
| ESOL 4010 Applied Linguistics for ESOL Teachers | 3 hours |
| ESOL 4020 Cultural Perspectives for ESOL Teachers | 3 hours |
| ESOL 4030 Methods and Materials for Teaching ESOL | 3 hours |

Total Required for the ESOL Endorsement 9 hours



**CERTIFICATE IN TEACHING ENGLISH TO
SPEAKERS OF OTHER LANGUAGES (TESOL) (ONLINE)**

Dr. Victoria Soady, Head, Department of
Modern and Classical Languages
Room 128, West Hall

This online certificate prepares majors from any discipline to pursue teaching opportunities with English Language Learners (ELLs) in corporate settings and in private language schools in the United States and internationally. It combines a theoretical foundation in second-language acquisition with practical experience. No previous background in linguistics is required for admission. Some background in a second language is recommended. It may be combined with any degree program.

The courses are designed to accommodate different needs and learning styles through computer-based, online instruction using synchronous and asynchronous multimedia tools: Wimba voice boards, virtual classrooms, and online social environments such as Second Life. These approaches allow for flexibility in scheduling for students. Students will be trained in using all necessary technology and supported throughout the course by faculty.

This stand-alone certificate is available for students who are not currently enrolled at Valdosta State University, subject to application and successful admission. International students must demonstrate competence in English by meeting the TOEFL score prescribed by university admissions.

Selected Educational Outcomes

Students will

1. Demonstrate an understanding of how to apply second-language acquisition theories, principles, and current research in creating instructional materials and in assessing ELLs.
2. Demonstrate an understanding of the role that language transfer plays in teaching and learning processes with ELLs in order to plan lessons that address possible interference between English and other languages.
3. Identify suitable ESOL assessment tools, administer assessments, and develop instructional materials to address specific literacy challenges of ELLs.

A grade of “C” or better is required in each course.

**Requirements for the online Certificate in Teaching English
to Speakers of Other Languages (TESOL)**

| | |
|--|---------|
| *ESOL 4010, *ESOL 4020, *ESOL 4030 | 9 hours |
| ESOL 4040, ESOL 4050, ESOL 4060 | 9 hours |

*Note: These three courses within the certificate fully satisfy the add-on ESOL Endorsement requirements for certified teachers in Georgia.



HEALTH PROFESSIONS
Room 2035 Bailey Science Center
Room 3025 Bailey Science Center

Most programs in the health professions require four years of study to complete the degree requirements that are prerequisite for eligibility to take licensing or certification exams. Valdosta State University provides two- or three-year pre-professional programs in the allied health fields listed below.

After completing one of these junior college curricula, students may qualify for the Associate of Arts degree from Valdosta State University and are eligible to apply for admission to an appropriate institution for completion of the professional training required for the baccalaureate degree.

Students interested in academic work listed below in preparation for admission to institutions where the professional training can be completed will be advised in the Department of Biology.

| | |
|--------------------------------|-------------------------|
| Community Health Nutrition | Optometry |
| Dental Hygiene | Pathologist's Assistant |
| Medical Records Administration | Physical Therapy |
| Medical Technology | Physician's Assistant |
| Occupational Therapy | Respiratory Therapy |

Pharmacy

Students interested in pharmacy in preparation for admission to institutions where the professional training can be completed will be advised in the Department of Chemistry.



DEPARTMENT OF HISTORY

Dr. Paul Riggs, Head
Room 210, Ashley Hall North

The Department of History provides an undergraduate program that leads to the Bachelor of Arts degree with a major in history. The Department also offers a minor in history. A graduate program leads to the Master of Arts degree with a major in history.

The undergraduate major and minor in the Department of History are designed to help students to further and to complete their general education by building upon the foundation that is afforded by the University's Core Curriculum. The programs also provide students with the basic knowledge, skills, and values required for professional careers in history and for advanced study in the field. The program is a flexible one that presents students with opportunities to supplement the major by taking one or two minors or even a second major.

History's scope is extremely broad, and people and their institutions form a particular focus of the discipline. The use of language and the ability to communicate skillfully also are concerns of history. Thus, the study of history prepares students for many different occupations and professions in which such qualities are essential.

Traditionally, teaching has been a career possibility, but, as well, graduates of the program in history are prepared to enter graduate school for further study, to seek employment in business or government, in museums and libraries, in publishing, journalism, and advertising, or to enter the military, politics, or theology. A degree in history is excellent preparation for business school or law school.

Students who are interested in the history major or who have questions about the vocational possibilities of the major should consult with members of the Department of History in Ashley Hall.

Honors Track for History Majors

The Honors Track in history allows students the option of pursuing the major at a more challenging level. To enter the track, student must be history majors with an overall GPA of 3.0. They must have a 3.0 average in all history courses taken and must have completed HIST 3000 with a grade of "B" or higher. They must maintain an overall GPA of 3.0 and a GPA of 3.0 in the major.

Students must complete three courses from among the following options, with at least a grade of "B" in each:

HIST 3030H Honors Topics in U. S. History; HIST 3040H Honors Topics in European History; HIST 3050H Honors Topics in World History; HIST 4800H Honors Directed Study: Thesis.

Students completing the Honors Track in history will have it noted on their transcript.

B.A. DEGREE WITH A MAJOR IN HISTORY

The Bachelor of Arts program with a major in history has numerous desired outcomes. Examples of the outcomes include the following:

Selected Educational Outcomes

1. Students will demonstrate knowledge of major political developments in history.
2. Students will demonstrate knowledge of major social developments in history.
3. Students will communicate effectively in writing and orally.
4. Students will demonstrate the ability to engage in critical analysis and historical interpretation.

Requirements for the Bachelor of Arts Degree with a Major in History

| | |
|--|-----------------|
| Core Areas A - E* (See VSU Core Curriculum) | 42 hours |
| Core Area F* | 18 hours |
| Foreign Language and Culture ¹ | 6 hours |
| HIST 2111 or HIST 2112 | 3 hours |
| HIST 1011 (if taken in Area E, then elective from list below) .. | 0-3 hours |
| HIST 1012 (if taken in Area E, then elective from list below) .. | 0-3 hours |
| HIST 1013 (if taken in Area E, then elective from list below) .. | 0-3 hours |
| Electives | 0-6 hours |
| Acceptable electives for Area E | |
| ANTH 1102, CS 1000, ECON 1500, GEOG 1101, GEOG 1102, | |
| GEOG 1103, MATH 2620, PHIL 2010, POLS 2101, POLS 2401, | |
| POLS 2501, PSYC 2500, REL 2020, SOCI 1101, SOCI 1160 | |

* All courses with the HIST prefix taken in Areas E and F must be completed with a grade of "C" or better.

¹Only two of three required courses in a single foreign language can be taken in Area F. The third course must be taken in Area C or as part of the the Senior College Curriculum (see below).

Senior College Curriculum 60 hours

HIST 3000 3 hours

Upper division courses in History 24 hours

Courses numbered above 3000, including at least one each
in: (a) European or British History; (b) United States
History; (c) Latin American, African, Middle Eastern, or
Asian History; (d) Additional course from categories
(a) or (c), above.

HIST 4950 3 hours

Foreign Language and Culture 0-3 hours
(if not taken in Area C)

Minor or Electives 27-30 hours

Must include at least six (6) semester hours in
courses numbered 3000 or above in a single
discipline outside the history major.

Total hours required for the degree 120 semester hours

Examples of Outcome Assessments

1. As a matter of established departmental policy, all upper division courses require written work in the form of essays, research papers, and other similar projects that help determine progress in written communication skills, analytical and interpretive skills, and mastery of course content.
2. Senior Seminar is designed to measure student progress in the program in the mastery of effective oral and written communication, the acquisition of skills in critical analysis and historical interpretation, and the ability to make effective use of library resources and computer and information technology.
3. When such information is available, the department will use as an assessment tool the results of University-wide collection of data that relate to the major and to History Department graduates.

The Minor in History 15 hours

Upper division history courses 15 hours



DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

Dr. Gregory Harrell, Head
Room 218, Ashley Hall

The Department of Mathematics and Computer Science is a multidisciplinary department with programs leading to baccalaureate degrees in mathematics, applied mathematics, mathematics with computer-science option, computer science, and computer information systems. The department also supports an interdisciplinary degrees in conjunction with the College of Education's program for secondary school teachers. Additionally, the department offers minors in mathematics, mathematics (statistics track), and computer science.

The programs in the department are designed to give the student the basic knowledge, skills, and values that build upon the foundation provided by the University Core Curriculum and that are required for professional careers in the mathematical and computing sciences. Moreover, through a series of sequenced courses, the department prepares the student for more advanced study, either at the graduate level or through company training programs. The requirements of the programs have been designed in keeping with national norms of excellence and according to well established model curricula where they exist. The major common feature shared by all the department's programs is the stress on critical thinking skills.

Students may gain work experience related to their major through the VSU Co-Op Program. Such experience may prove valuable in terms of career exploration, acquisition of new skills, and career development.

B. S. DEGREE WITH A MAJOR IN APPLIED MATHEMATICS

Selected Educational Outcomes

1. Students will solve problems involving groups, rings, fields, and their applications.
2. Students will solve problems involving of vector spaces, linear transformations, eigenvalues, and normed linear spaces.
3. Students will exhibit the logical reasoning skills and technical background necessary to do mathematical proofs by proving theorems in set theory, analysis, linear algebra, and abstract algebra.
4. Students will use mathematical software and modeling to solve problems in numerical analysis, operations research, and statistics.

REQUIREMENTS FOR THE B.S. DEGREE WITH A MAJOR IN APPLIED MATHEMATICS

Core Curriculum Areas A-E (See VSU Core Curriculum) **42 hours**
 (Applied Mathematics Majors are required to take Math 1113 in Area A and Math 2261 in Area D.)

Core Curriculum Area F **18 hours**
 MATH 2261 “spillover” from Area D 1 hour
 MATH 2262, MATH 2263 8 hours
 CS 1301 (3 credits “spill over” into “Supporting Courses”) 1 hours
 PHYS 2211K, PHYS 2212K 8 hours

Senior College Curriculum **60 hours**
 Courses Required for the Major 36 hours
 MATH 2150, MATH 3600, MATH 4621 9 hours
 MATH 3040, MATH 3340, MATH 4150 9 hours
 MATH 4081, MATH 4260, MATH 4651 9 hours
 MATH 4901, MATH 4910 6 hours
 One of the following: 3 hours
 MATH 4622, MATH 4630, MATH 4652,
 MATH 4902, PHYS 3100, PHYS 4111,
 PHYS 4211, PHYS 4411
 Supporting Courses 6-9 hours
 CS 1301 “spillover” from Area F 3 hours
 Foreign Language & Culture Requirement 3-6 hours
 Electives 15-18 hours
 Must include at least 6 hours of courses numbered 3000 or above in a single discipline outside the major.

Additional Requirements and Notes

1. Students must complete 16 credits of laboratory science, including the calculus-based physics indicated in Area F.
2. A grade of “C” or better must be earned in all “Courses Required for the Major.” Also, a grade of “C” or better is required in MATH 1111, 1112, 1113, 2150, 2261, 2262, 2263, and CS 1301, if any of those courses are taken.
3. Students must complete a sequence of two courses in any foreign language, either in “Supporting Courses” or in a combination of Area C and “Supporting Courses.” Minimum acceptable grades in the language courses are the same as minimum acceptable grades in the Core Curriculum.

Total hours required for the degree **120 semester hours**

SECOND DEGREE IN MATHEMATICS

The B.S. degree with a major in applied mathematics is available as a second bachelor's degree for students receiving the B.S.Ed. with a major in secondary education in the teaching field of mathematics, by completing CS 1301, MATH 3340, MATH 4260, MATH 4621, MATH 4651, and either MATH 4901 or MATH 4910 (whichever course was not taken to fulfill the requirements for the B.S.Ed. degree), and 3 credit hours chosen from MATH 3900, MATH 4622, MATH 4630, MATH 4652, MATH 4902.

The B.A. degree with a major in mathematics is available as a second bachelor's degree for students receiving the B.S.Ed. with a major in secondary education in the teaching field of mathematics, by completing MATH 3340, MATH 4260, MATH 4621, MATH 4980, and 6 credit hours chosen from MATH 3010, MATH 4082, MATH 4300, MATH 4540.

Any of the following courses that are taken by the student must be completed with a grade of "C" or higher: MATH 1101, MATH 1111, MATH 1112, MATH 1113, MATH 1113H, MATH 2150, MATH 2261, MATH 2262, and MATH 2263, as well as all upper-division MATH courses.

Students interested in graduating with the B.S.Ed. degree and either the B.S. degree with a major in applied mathematics or B.A. degree with a major in mathematics should consult the department head concerning the procedures to follow in applying for the second degree.

BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN COMPUTER SCIENCE

Selected Educational Outcomes

1. Students will design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
2. Students will demonstrate ability to use current techniques, skills, and tools necessary for computing practice.
3. Students will apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the trade-offs involved in design choices.

REQUIREMENTS FOR THE B.S. DEGREE WITH A MAJOR IN COMPUTER SCIENCE

Core Curriculum Areas A-E (See VSU Core Curriculum) **42 hours**

Majors in Computer Science are required to take Precalculus (MATH 1113) in Area A and Analytic Geometry and Calculus I (MATH 2261) in Area D.

| | |
|---|-----------------|
| Core Curriculum Area F | 18 hours |
| CS 1301 and 1302 and 2620 | 11 hours |
| MATH 2261 “spillover” from Area D | 1 hours |
| MATH 2262 | 4 hours |
| D.II.a Laboratory Science | 2 hours |
| (with 2 hours “spilling” into Supporting Courses) | |

| | |
|---|-----------------|
| Senior College Curriculum | 60 hours |
| Courses Required for the Major | 39 hours |
| CS 3101, CS 3300, CS 3335, CS 3410 | 12 hours |
| CS 3520, CS 4345 | 6 hours |
| CS 4121, CS 4321, CS 4721, CS 4500, CS 4900 | 15 hours |
| Additional 3000-level or 4000-level courses in CS (except CS 4800) | 3 hours |
| Additional 4000-level courses in CS | 3 hours |
| (except CS 4800) | |
| Supporting Courses | 11 hours |
| D.II.a Laboratory Science | 2 hours |
| (“spillover” from Area F) | |
| MATH 2150 and MATH 3600, and MATH 4651 or MATH 4901 | 9 hours |
| Electives | 10 hours |

Additional Notes:

1. The 12-hour lab science requirement must include a two-course sequence. All three courses must be from Area D.2.a. Students not completing these requirements in their Core Curriculum must complete them with elective courses.
2. Students must receive a “C” or better in all of the lower-division mathematics and computer-science courses completed to satisfy the degree requirements.

Total hours required for the degree 120 semester hours

BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN COMPUTER INFORMATION SYSTEMS

Selected Educational Outcomes

1. Students will design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
2. Students will demonstrate ability to use current techniques, skills, and tools necessary for computing practice.
3. Students will demonstrate an understanding of processes that support the delivery and management of information systems within a specific application environment.

**REQUIREMENTS FOR THE B. S. DEGREE WITH A MAJOR IN
COMPUTER INFORMATION SYSTEMS**

Core Curriculum Areas A-E (See VSU Core Curriculum) **42 hours**

Core Curriculum Area F **18 hours**

CS 1301, CS 1302, CS 2620 11 hours

ACCT 2101-2102 6 hours

MATH 1261/1262 (or MATH 2261/2262) 1 hour

Note: There is a requirement in this program that a student complete a six-credit sequence of calculus. One credit in Area F can be devoted to these six credits of calculus.

Senior College Curriculum **60 hours**

Courses Required for the Major 33 hours

CS 3101, CS 3410, CS 4345 9 hours

One of CS 3300, CS 3320, CS 3335, CS 3340 3 hours

CS 4121, CS 4321, CS 4721 9 hours

One of CS 4122, CS 4322, CS 4722 3 hours

Two of any 3000-level or 4000-level course not required above 6 hours
(excluding CS 3000, CS 3001, and CS 4800)

One of any CS 4000-level course not required above (excluding CS 4800) 3 hours

Supporting Courses 17-20 hours

Completion of the calculus sequence, MATH 1261-1262 (or MATH 2261-2262) 2-5 hours

MATH 2620 or MATH 3600 3 hours

Choose one of the following areas: 12 hours

Business:
ECON 2106, MGNT 3250, MGNT 3300 plus either FIN 3350 or MKTG 3050

OR
Technical Communications:
ENGL 3020, ENGL 3080, ENGL 3090, plus either COMM 1110 or COMM 2400

Electives 7-10 hours

Additional Requirements:

1. No more than 4 hours of electives may be taken in courses offered by the College of Business Administration.
2. A grade of "C" or better must be earned in all Area F courses and core curriculum lower-level math courses, all courses required for the major, and all supporting courses.

Total hours required for the degree **120 semester hours**

**BACHELOR OF ARTS DEGREE WITH A
MAJOR IN MATHEMATICS**

Selected Educational Outcomes

1. Students will explain and produce mathematical proofs in set theory, algebra, and analysis to indicate that they have acquired the necessary logical reasoning, reading and writing skills.
2. Students will prove statements, produce examples, and apply the appropriate theoretical results to a given problem to show understanding of various algebraic structures, including, but not limited to, groups, fields, rings, and vector spaces.
3. Students will prove statements, produce examples, and apply the appropriate theoretical results to a given problem to demonstrate understanding of the analytic structure necessary for the classical (real-valued function) calculus and its generalization.
4. Students will synthesize the results and techniques of the major branches of mathematics, demonstrated by presentation of mathematics in written and oral form.

**REQUIREMENTS FOR THE B.A. DEGREE WITH A
MAJOR IN MATHEMATICS**

Core Curriculum Areas A-E (See VSU Core Curriculum) **42 hours**

Mathematics majors are required to take Precalculus (MATH 1113) in Area A and Analytic Geometry and Calculus I (MATH 2261) in Area D.

Core Curriculum Area F **18 hours**

MATH 2261 “spillover” from Area D 1 hour

MATH 2262, 2263 8 hours

CS 1010 or CS 1301 or CS 1340 3 hours

(1 credit spills over into “Supporting Courses”)

Part of 3-course sequence in any foreign language 6 hours

Senior College Curriculum **60 hours**

Courses Required for the Major 33 hours

MATH 2150, MATH 3600, MATH 4621 9 hours

MATH 3040, MATH 3340, MATH 4150 9 hours

MATH 4260, MATH 4081, MATH 4980 9 hours

Select 2 from: MATH 3010, MATH 3510,

MATH 4082, MATH 4300, MATH 4540 6 hours

Supporting Courses 1 hour

CS 1301 “spillover” from Area F 1 hour

Electives 26 hours

Must include at least 9 hours of courses numbered 3000 or above.

Additional Requirements and Notes

1. The foreign language courses in area F must meet Arts and Sciences guidelines for the B.A. degree; furthermore, these courses, along with an additional language course either in Area C or in Electives, must constitute a 3-course

sequence in any foreign language. Minimum acceptable grades in the language courses are the same as minimum acceptable grades in the Core Curriculum.

2. If taken, a grade of “C” or better is required in MATH 1111, MATH 1112, MATH 1113, MATH 2150, MATH 2261, MATH 2262, MATH 2263, CS 1010, CS 1301, and CS 1340.

Total hours required for the degree 120 semester hours

Minor in Computer Science. 17 hours

The minor in computer science may be earned by completing the following courses with grades of “C” or better.

| | |
|--|---------|
| CS 1301, CS 1302 | 8 hours |
| CS 3101, CS 3410 | 6 hours |
| Any CS course at the 3000-level or above (except CS 4800) | 3 hours |

Minor in Mathematics. 16-17 hours

The minor in mathematics may be earned by completing:

MATH 2262, MATH 3040 7 hours

Plus 3 courses from: 9-10 hours

MATH 2263, MATH 3340, MATH 3600, MATH 4150,
MATH 4081, MATH 4082, MATH 4260, MATH 4300,
MATH 4621, MATH 4622, MATH 4651, MATH 4652,
MATH 4901, MATH 4902, or MATH 4910

All courses for the minor must be completed with a grade of “C” or better.

Examples of Outcomes Assessments

The department assesses the extent to which the program requirements create the desired outcomes by a variety of techniques. Examples of these assessments include the following:

1. The capstone courses are used to assess student progress since taking Area F courses. They determine if students have mastered effective oral and written communication skills, acquired critical analysis skills, and learned to use the library and technological resources in solving non-routine problems. Assessment methods include student projects and presentations.
2. Student examinations and samples of student work are kept in the department and are examined by the faculty to assess student content knowledge.
3. Available student and alumni survey data collected by the University will be examined to determine student satisfaction with their undergraduate preparation for further education or employment.