

<i>Total courses in two majors</i>	<i>Maximum overlap permitted</i>	<i>Minimum # of distinct courses required</i>
16	0	16
17	1	16
18	2	16
19	3	16
20 or more	3	17 or more

Overlap between minors. There may be no overlaps between minors.

Special Academic Programs

The Academic Writing Program

Minimum Grade in English 101. As the first step in developing competence in writing, a minimum grade of “C” is required of all students receiving credit for English 101.

Departmental Writing Programs. All students will meet Writing Program requirements through a departmental writing program.

Group Majors. Departments that established departmental writings programs will include provisions for their group majors. When students initiate a group major other than those formally approved by the faculty, they must include plans for meeting the Writing Program requirements. Students should obtain approval for such plans from their major advisors and the director of the Writing Program.

Transfer Students.

Students who transfer into a major program should work with their major advisor to determine what they must do to satisfy Writing Program requirements.

The Access Program

The Access Program provides an alternative entry into Calvin College for those students who do not meet admission standards, but whose records indicate that they could develop into successful college students. Admission into this program is determined by the Committee on Admissions and is based on high school grades, high school course work, ACT/SAT I scores, and recommendations. Enrollment, by means of this program, is limited each year to a specific number of first-year students.

After a student has been selected to be part of the Access Program, placement tests in English and mathematics are given to determine whether review course work is necessary in either or both areas. All Access students are required to take ASC 006: College Thinking and Learning. This course, a 2 semester hour, non-credit course, is taken concurrently with a reading-lecture course in which the student learns to apply what is taught in ASC 006.

Students in the Access Program are assigned to special academic advisors who are familiar with the program requirements and the methods by which academic progress can be attained. Typically, Access students are very involved in the program during their first semester; additional follow-up may occur during the second semester. Please see more information under *Office of Student Academic Services* on page 18 and *Academic Services* on page 49, or visit our website at: <http://www.calvin.edu/academic/sas>.

The Adult and Continuing Education Program

Adults who wish to begin a college program or return to college courses may enroll under the classification of Adult Learner. This classification includes:

1. Adults with no prior college experience and at least a four year interruption in education since high school.
2. Adults transferring into Calvin College who have a combination of course work and work experiences equivalent to four years of activity since high school.
3. Post baccalaureate students returning for a second degree or a set of course work related to their emerging interests and commitments.

Adult learners seeking to complete a degree from Calvin College must fulfill requirements for a major and for liberal arts core courses. At least 25% of the semester hours required for graduation and a minimum of three courses in the designated major must be completed at Calvin College.

Adult Learners who enter or return to Calvin with 88 credits or less must complete the new Adult Learner Core Curriculum. Under the new core curriculum, Adult Learners will be required to complete one course in each of the following areas: Developing the Christian Mind or Biblical/Theological Studies II, Global/Historical Studies or Foreign Language Competency, Written Rhetoric, Rhetoric in Culture, History of the West & the World, Philosophical Foundations, Biblical/Theological Foundations I, Persons in Community, Societal Structures in North America, Literature, The Arts, Mathematics, Natural World (Physical or Biological Science), a Capstone Course, and an approved Cross-cultural engagement.

Adult Learners entering or returning to Calvin with 89 or more credits must complete the following liberal arts core requirements at Calvin College or through transfer credit. These requirements include one core course each in history, philosophy, and religion, plus an additional course from any of the departments or Interdisciplinary W10, Christian Perspectives on Learning; a mathematics course; a course in the natural sciences; two courses from economics, political science, psychology, or sociology (with no more than one course from one department); a literature course taught in English; a course from art, communication arts, foreign literature and culture, or music; a fine arts course; a course in written rhetoric; and a course in spoken rhetoric. If a student has not completed a foreign language through the second year college level, then a foreign culture course must be taken to fulfill the fine arts core course requirement.

NOTE: Certain programs and majors do not allow this modified liberal arts core as fulfilling graduation requirements. For example, Adult Learners in the teacher education program and the nursing program must fulfill the liberal arts requirements specific to those programs. Adult Learners should seek the advice of an academic advisor from their program or major early in their enrollment at Calvin.

Adult Learners may also obtain credit through the development of a prior learning portfolio. The portfolio provides a means for adult learners to petition for college credit based on prior learning through work or volunteer activities. Students must write essays and supply documentation when petitioning for prior learning credit. Normally, one to four semester hours may be granted for each essay and appropriate documentation. A total of 16 semester hours may be obtained through the prior learning portfolio.

Students seeking classification as an Adult Learner should indicate this when they complete their admission forms. Questions about the Adult Learner classification may be directed to the Office of the Registrar.

The Honors Program

Calvin College offers special opportunities for students of outstanding academic ability throughout their undergraduate education. The Honors Program is intended to provide for the discovery, nurturing, and rewarding of academic excellence, and to prepare outstanding students for leadership in service to the immediate community and the world at large.

Incoming students are automatically invited to participate in the Honors Program if they have an ACT composite score of 29 or higher. Current students whose cumulative GPA at Calvin is 3.3 or higher are also eligible to participate. Other students may apply to the director with a personal statement of interest, a current transcript, and ACT test scores.

Students in the Honors Program may register for special honors sections of core courses, contract with a professor to take a regular course for honors credit (for which extra work is required), seek exemptions from core requirements by examination, propose cross-disciplinary programs of concentration, and participate in various extracurricular events for honors students. Honors classes generally assume a high level of motivation and initiative on the part of the student, and aim at greater depth of learning than a regular class.

To graduate with honors, students must complete at least six honors courses (a minimum of eighteen semester hours with at least two of these courses in their major), maintain a GPA of at least 3.5, and fulfill any other conditions established by the department in which they major. These departmental requirements are spelled out in the *Honors Program Handbook*, available on the website. Regular interim courses with honors grades are not considered honors courses. Students must apply for admission to the departmental honors program in their major after completing at least two honors courses in the general curriculum and earning a cumulative GPA of 3.3 or higher. They must also submit an "Application to Graduate with Honors" by February 15 of their senior year.

For further information, contact the Director of the Honors Program, K. Bratt (Classics Department), or see the web page at www.calvin.edu/academic/honors/.

Professional-degree programs

Information regarding professional-degree programs can be found in the department under which they fall in the Academic Departments/Courses section of the catalog.

Pre-professional Programs

The programs in this section prepare students for admission to professional and graduate schools while also meeting the requirements for a Bachelor of Arts or Bachelor of Science degree from Calvin.

Law

There is no prescribed program specifically designed for the student planning to enter a law school after graduation. Law school applicants must have a college degree and must take the Law School Admission Test, but law schools do not require that applicants have taken specific courses or have a particular major concentration. Prospective law school applicants should complete the requirements for a Bachelor of Arts degree as they are listed on pages 33–36. The pre-law advisor, C. Pollard, of the Department of English, can advise students on suitable electives and can help them plan programs, which provide good preparation for law school. Pre-law students should declare their interest in law at registration time and they should also plan to attend one of the pre-law information sessions held at the beginning of the fall semester.

Medicine and Dentistry

Students planning to enter the pre-medical or pre-dental programs should consult P. Tigchelaar, of the Department of Biology, faculty advisor for the pre-medical and pre-dental programs. Students should also note the general college core requirements on pages 33–36.

A student may select any major concentration and still meet the entrance requirements for all medical and dental schools. However, nationwide the majority of the applicants to medical and dental schools are science majors.

For those students not majoring in biology, the minimum science requirements for entrance into nearly all medical or dental schools are met by the following: Three courses in biology (which should be selected in consultation with the pre-medical advisor); Chem-

istry 103-104, 261-262 (Chemistry 323 is required by some schools); and Physics 221-222 or the equivalent. Mathematics 132 and 143 are recommended, but Mathematics 161-162 is required by some medical schools.

Because a few schools have unique requirements, students should consult with P. Tigchelaar to determine specific requirements of the schools to which they intend to apply.

Pre-medical and pre-dental students normally take their Medical College Admissions Test (MCAT) or Dental Admissions Test (DAT) in the spring of their junior year and should apply for admission to the medical or dental school during the summer prior to their senior year.

Ministry

The Association of Theological Schools (A.T.S.) recommends that pre-seminary students develop the ability to think, communicate, and do independent research. As well, pre-seminary students should learn about human culture and society, and they may develop proficiency in biblical languages, Latin, and modern languages. Pre-seminary students should consult the catalogs of the seminaries that they intend to enter for specific admission requirements. Pre-seminary students should direct any questions to the advisor of all pre-ministry programs, D. Crump, of the Religion Department.

To qualify for admission to Calvin Theological Seminary, students must meet all of Calvin's requirements for a bachelor's degree, as well as the admissions requirements of the seminary, including a minimum grade point average of 2.67. Calvin Theological Seminary recommends that pre-seminary students emphasize the following areas of study: Classical civilization, English, Greek, history, philosophy, psychology, sociology, and theology.

Calvin Seminary's Master of Divinity (M. Div.) program prepares persons for ordination. To enter the Master of Divinity program, pre-seminary students must complete the following courses:

- Language: At least two years of Greek
- Humanities: A total of at least 24 semester hours (8 courses) in English, history, and philosophy, with at least two semester-length courses each in literature, history, and philosophy (preferably history of philosophy)
- Natural science, social science, and speech: At least two courses in each

Calvin College students should include the following courses in their programs: Greek 205-206; Philosophy 251 and 252; and Communication Arts and Sciences 100 or 101 and 200. Communication Arts and Sciences 203 and 240 are recommended.

Calvin Seminary's Master of Arts in Educational Ministry program prepares persons for positions of leadership in the church that do not require ordination, particularly in educational ministry. The courses required for admission are generally met by the college graduation requirements, with the addition of two courses from education and psychology, including a course in education psychology.

Calvin Seminary's Master of Arts in Missions and Church Growth program prepares persons for leadership in professional settings such as missions and para-church organizations. Admission requirements are generally met by Calvin College graduation requirements, but students must complete at least three courses in the social sciences, one of which must be in Social or Cultural Anthropology.

Calvin Seminary's Master of Theological Studies program provides a theological education that emphasizes vocational objectives for students who are not seeking ordination. Specific requirements beyond those required for graduation from the college include four courses in Greek; competence in a modern foreign language through the second-year college level is recommended.

Professional Combined-Curriculum Programs

Occupational Therapy

Preparation for entrance into the field of Occupational Therapy (OT) requires earning a Master of Science degree (M.S.O.T.) or a doctor's degree (O.T.D.) in Occupational Therapy, completing a six-month internship, and passing a national board examination. Admission into these graduate programs requires a college degree with any major so long as certain specified courses are taken. It also requires work or volunteer experience in O.T., which can be arranged through the Service-Learning Center at Calvin.

Because the specific courses required for admission to occupational therapy are designated by the school offering the degree, the student should obtain a list of these required courses from each school to which they intend to apply. This step can be completed after arriving at Calvin and learning which schools offer O.T. programs. Before registering for classes, a schedule for each student is arranged in consultation with the pre-occupational therapy advisor, R. Nyhof, of the Biology Department.

Calvin College offers a 3-2 combined curriculum program with the Program in Occupational Therapy, Washington University School of Medicine in St. Louis, Missouri. A student participating in this program would spend three years at Calvin College taking the specific courses listed below, apply for acceptance into the program at Washington University, and if accepted, transfer to Washington University for the two clinical years. Upon successful completion of the first year, the student would receive a Bachelor of Science in Letters and Occupational Therapy from Calvin College and a M.S.O.T. from Washington University upon successful completion of the second year program. Alternatively, a student accepted into the O.T.D. program would spend three years at Washington University. A student applying from Calvin will receive preferential status in his/her application for either program.

The three-year program at Calvin includes the following requirements:

Developing a Christian Mind Gateway Course

Art 215

Biology 141, 205, and 206

Chemistry 115

Communication Arts and Sciences 101

History 151 or 152

Philosophy 153 and Philosophy 212 or Biology 396.

Religion 121 or 131

Religion 211-214 or 221-224

Interdisciplinary 149 and Interdisciplinary W50/150

Economics 151 or Political Science 101

English 101 (with Interdisciplinary 110) and one course in literature

Foreign language, through the second year college competency

Mathematics 143 or Psychology 255

Music 103, 106, 236, or 238

Physical Education: 3 activity courses

Physics 223

Psychology 151, 201, and 212

Sociology 151 and 153

Pre-professional transfer programs

Architecture

Various courses of study may be pursued as preparation for a professional degree in architecture, because of the broad nature of a profession concerned with design, history and culture, and the social and technical sciences. Although Calvin College offers no de-

gree in architecture, a student can focus individual gifts and abilities within the architectural field by taking a liberal arts undergraduate program in art, art history, business, communications, engineering, geography, history, philosophy, environmental science, sociology, political science, or other related fields. Any one of these programs, with carefully chosen electives, can prepare the student for entry into a graduate program for the master of architecture as a first professional degree. Four years of high school math is recommended, since at least one course in Calculus and Physics 221 and 222 are required. A student may also choose to take a two-year program and transfer into a school of architecture. In either case, the student should plan on six to eight years of formal education followed by an internship. Students interested in such a program should consult with C. Young of the Department of Art. The first two years typically include:

<i>First year</i>	<i>Semester hours</i>
Art 153	3
English 101	3
Engineering 103	4
Mathematics 161 and possibly 162	4 or 8
Economics 151 or 221	3 or 4
Religion core	3
Physical education	1
<i>Second year</i>	<i>Semester hours</i>
Architectural History 201, 202, and Art Studio 250	11
Chemistry, if none in high school; biology; or psychology	3–4
Physics 133/134 or 221 and 222	8
Literature core	3
Philosophy 153	3

Natural Resource Programs

Students interested in stewardship of God's creation can complete degrees in Resource Ecology, Policy and Management, and Resource Institutions and Human Behavior.

Resource ecology requires students to become proficient in biology, physical sciences, mathematics, and computer science. Students considering careers in researching fisheries, wildlife, and forestry should complete a biology concentration at Calvin, while also fulfilling graduate school requirements. Students should consider graduate education in Natural Resources to increase their employment options.

Resource policy and management requires students to become proficient in economic theory, management skills, social sciences, communication skills, and political institutions. This emphasis is appropriate for students who seek careers in management of resources (forestry, fisheries, and wildlife management), planning (landscape architecture), or policy (resource economics, policy, advocacy, education, and communication). Landscape architecture requires completion of courses in design, graphics, engineering, and planning.

Resource institutions and human behavior requires students to become proficient in social and behavioral sciences, learning how individual, group, and institutional behavior affects the use and allocation of natural resources.

Students follow one of two paths to gain professional competence in the Natural Resources, in any of the above fields: 1) Completion of a Bachelor's degree at Calvin followed by graduate study or 2) After two years of study at Calvin and then transfer to a professional program elsewhere. Transferring after two years is suggested for students interested in resource policy and resource management. Students who expect to transfer should complete the first two years of the Biology major, one year of mathematics, one year of chemistry, and as many courses in computer science and economics as possible.

Students interested in these areas should consult D. Warners, of the Biology Department, early in their college careers.

Optometry

Students wishing to become optometrists may complete three to four years at Calvin before entering optometry school to complete four additional years of study culminating in the Doctor of Optometry (O.D.) degree. Most optometry schools now prefer that transfer students complete a B.A. or B.S. degree before entering optometry school. Requirements of the various schools vary, but all require the following:

	<i>Semester hours</i>
Biology 141 and 242	8
Biology 207 or 336	4
Chemistry 103 and 104	8
Chemistry 261 and 262 or 253	5-10
Physics 221 and 222	8
Mathematics 132 or 161	4
Mathematics 143	4
English 101 and a literature course	6
Social Science (Psychology 151, Sociology 151)	3-6

Many schools also recommend physiology, anatomy, biochemistry, and a business or economics course. These requirements may be met within the context of a biology major or group science major at Calvin College. Students should consult the website of the Association of Schools and Colleges of Optometry (www.opted.org) and work with the pre-optometry advisor, J. Ubels, to plan a course of study that meets the requirements of the optometry schools to which they intend to apply. All applicants to optometry school are required to take the Optometry Admission Test (OAT), which is offered each year in October and February. Application deadlines at the various optometry schools range from January 1 to April 1.

Pharmacy

Students interested in a career in pharmacy will complete two to three years at Calvin College before transferring to a college of pharmacy to complete four additional years of study culminating in a Doctor of Pharmacy (Pharm.D.) degree. Pre-pharmacy requirements of the various pharmacy schools vary greatly. As an example, the courses required by the Ferris State University College of Pharmacy in Big Rapids, Michigan are shown below:

	<i>Semester hours</i>
Biology 141 and 242	8
Biology 207	4
Chemistry 103 and 104	8
Chemistry 261 and 262	10
Mathematics 132 or 161	4
Mathematics 143	4
English 101 and 201 or 205	6
Economics 151	3
Communication Arts and Sciences 101 or 240	3
Psychology 151 or Sociology 151	3
Art, Music, History, Literature, Philosophy, Religion	9

These courses may be completed in two years; however, other schools may require courses in anatomy, physiology, and physics, which could increase the length of the pre-pharmacy program to three years. Students should consult the American Association of Colleges of Pharmacy website (www.aacp.org) and work with the pre-pharmacy advisor, J. Ubels, to plan a course of study appropriate for the pharmacy schools to which they intend to apply. Most pharmacy schools require the Pharmacy College Admission Test (PCAT), which should be taken in the fall semester of the student's final year at Calvin.

Physical Therapy

Students wishing to enter the field of Physical Therapy (PT) must complete a master's degree or a doctor's degree (D.P.T.) in Physical Therapy (M.S.P.T.). Beginning in the year 2020, a D.P.T. will be required for entrance into the profession. Students at Calvin College can prepare to complete this degree in two ways. First, students may complete two years of prerequisite courses at Calvin (prerequisite courses are described later) and then transfer to the general undergraduate program at an Institution offering a graduate degree. Following a third year, they could apply to a professional school at that institution to earn the M.S.P.T. degree. Second, students may complete the prerequisite courses in conjunction with a degree program in any discipline. Students then attend graduate school. Because admission to graduate programs in Physical Therapy is very competitive, students are frequently advised to choose the second option; this option will lead to a degree in addition to completing the prerequisite courses. Calvin has developed an articulation agreement with the Herbert H. and Grace A. Dow College of Health Professions Physical Therapy Program at Central Michigan University (CMU). Under this agreement, CMU will guarantee acceptance will guarantee acceptance for up to two Calvin students per year who have met their requirements.

The prerequisite courses depend on the graduate school to which students wish to apply; therefore, students should obtain a list of requirements for each of the schools to which they plan to apply. Below is a sample list of prerequisite classes for non-Biology majors. Students are encouraged to contact the advisor of the pre-physical therapy program, R. Nyhof, of the Biology Department, before they register for classes. Students must also work or volunteers with patients under the supervision of a licensed physical therapist. This can be arranged through the Service Learning Center at Calvin.

<i>First Year Fall Semester</i>	<i>First Year Spring Semester</i>
Biology 205	Biology 141
Chemistry 103	Chemistry 104
Core courses	Core or major concentration courses
<i>Second Year Fall Semester</i>	<i>Second Year Spring Semester</i>
Biology 206	Mathematics 143
Chemistry 253 (offered alternate years)	Psychology 201
Psychology 151	Core or major concentration courses
Core or major concentration courses	
<i>Third Year Fall Semester</i>	<i>Third Year Spring Semester</i>
Physics 221	Physics 222
English 201	Core or major concentration courses
Core or major concentration courses	

Physician Assistant

Students who would like to practice medicine under the supervision of a licensed physician should consider becoming a Physician Assistant (PA). A Physician Assistant can record medical histories, perform physical examinations, make diagnoses, counsel patients, order and administer laboratory tests, assist in surgery, set fractures, and, in most states, prescribe drugs.

Each graduate program determines their prerequisite courses, and since there is so much variability from one program to another, Calvin College does not offer a specific program for students who want to prepare for a career of Christian service as a Physician Assistant. Students who desire to pursue a career as a Physician Assistant should contact either P. Tigchelaar or R. Nyhof for advice about preparatory courses and hours of direct patient care required by particular clinical training programs.