

Blue Marble University

Fast Track Combination Bachelor of Science (B.S.) and Doctor of Science (D.Sc.) in Applied Biology

**5 Year program which you can enter right after High School
And Complete Entirely Online**

B.S./D.Sc. 5 year Fast Track Combination Program, featuring a Bachelor Degree in General Biology and a Doctoral Degree in Applied Biology

This is a multidisciplinary program that can be entered after High School. The first two years feature an introduction to various areas of biology and the doctoral program is a multidisciplinary education in applied biology. This program is best for those that want broad training in many areas that may be suitable for careers in clinical, biomedical, research, industrial, or academic settings.

We operate on a trimester schedule, which means that our academic year is divided into 3 segments of 4 months each. In each 4 month period, students take three courses. For some terms, or as determined by the University, students may be assigned courses in sequence, lasting about 1 month each. In that event, for any approximate one month period, a student will be studying one course.

Years 1 and 2 are Used for the Bachelor Degree Part of the Program

(See our note at the end relating to Seat Time)

Year 1	Year 2
Term 1	Term 1
Introduction to Biology I (Course #310) 4 credits	Cell Biology (Course #320) 4 credits
Introduction to Biology II (Course #311) 4 credits	Plant Biology (Course #321) 4 credits
Digital Portfolio 1: Purpose (Course #DP101) 4 credits	Marine Biology (Course #322) 4 credits
English Writing (Course #E101) 6 credits	

Year 1	Year 2
Term 2	Term 2
Pond Water Biology (Course #312) 4 credits	Microbiology (Course #323) 4 credits
Biology Lab Techniques and Protocols I (Course #313) 4 credits	Forensic Biology (Course #324) 4 credits
Digital Portfolio 2: Basic Blog Set-up (Course #DP 102) 4 credits	Digital Portfolio 4: Presentation (Course #DP 104) 4 credits
Term 3	Term 3
Biology Lab Techniques and Protocols II (Course #314) 4 credits	Biology Seminars (Course #326) 4 credits
Introduction to Genetics, Course #315 4 credits	Biostatistics (Course #327) 4 credits
Digital Portfolio 3: Create Portfolio Outline (Course#DP 103) 4 credits	Independent Study (Course #328) 4 credits

Note: Satisfactory Completion of the first two years of this program qualifies the student for continuing into the 3 year doctoral program in stem cell biology, and that 3 year program is detailed again here:

Year 3	Year 4	Year 5
Term 1	Term 1	Term 1
Biomedical Engineering Overview (Course #AB610), 3 credits	Plant Science (Course #AB630) 3 credits	Research Methodology and Writing (Course #AB680) 3 credits
Biomedical Engineering Medical Apps (Course #AB612), 3 credits	Plant Genetics and Breeding(Course #AB632) 3 credits	Topics for Thesis (Course #AB682) 3 credits
Batch Preparation of Bacterial Cells (Course #AB614), 3 credits	Soil Science and Fertility (Course #AB634) 3 credits	Dissertation Preparation I (Course #AB684) 3 credits
Term 2	Term 2	Term 2

Year 3	Year 4	Year 5
Batch Preparation of Human Cells-Tissue Engineering (Course #AB616), 3 credits	Sexual and Asexual Propagation (Course #AB636) 3 credits	Dissertation Preparation II (Course #AB686) 3 credits
Nano-particles (Course #AB618), 3 credits	Plant Growth Systems and Urban Farming (Course #AB638) 3 credits	
Immunoassays (Course #AB620), 3 credits	Waste Management Biology (Course #AB640) 3 credits	
Term 3	Term 3	Term 3
Stem Cells- Adult and Fetal (Course #AB622) 3 credits	Biological Apps for Water Resources (Course #AB642) 3 credits	Dissertation Presentation (Course #AB700) 6 credits
Stem Cells-Embryonic (Course #AB624), 3 credits	Genomics and Proteomics (Course #AB644) 3 credits	
Stem Cell Identification (Course #AB626), 3 credits	Biology of Food Contamination (Course #AB646) 3 credits	

A description of the courses can be found in the Department of Biology Course Handbook.

Note Concerning Undergraduate Degree and "Seat Time":

As we have stated before, we drop "seat time" from each and every one of our programs. All of our students must demonstrate "Proficiency" with regard to the subject matter of their studies. Consequently, our programs are shorter.

"Seat time", which is the foundation of "accreditation" in the USA, is the old fashioned, outdated requirement that a student spend a required amount of time and/or take required general studies courses in order to receive a Bachelors Degree. We follow the USA Department of Education in its "National Education Technology Plan 2010" wherein it recognized that "seat time" has got to go. At Page 12 of the report: *"One of the most basic assumptions in our education system [accreditation] is time-based or "seat-time" measures of educational attainment.... [colleges and universities should be organized] around competence rather than seat time and others that enable more flexible scheduling that fits students' individual needs rather than traditional academic periods and lockstep curriculum pacing."*