Liberal Arts: Math & Science Associate of Science | Degree Map

Follow this map to graduate in two years, though other paths are possible. You must average 15 credits a semester to finish in two years. Contact an advisor for additional support, and see the back for more information.

| | Course PC = Program Core; RC = Required Core; FC = Flexible Core | Category | Credits | Session |
|------------|---|---|--|------------------------------------|
| SEMESTER 1 | Math & Science First Year Learning Community (see back) | | | |
| | - LMF101 First Year Seminar for Liberal Arts: Math and Science | PC | 3 | I |
| | - ENG101 English Composition I (or ENA101) | RC | 3 | I |
| | - MAT115/117 Algebra & Trigonometry (pre-req for MAT200) | RC | 3 | I |
| | Humanities Course | PC | 3 | I |
| | Flexible Core Course (see back for more information) | FC | 3 | Ш |
| | Course | Cotogomy | Cuadita | Section |
| | ENG102 Writing through Literature or ENG259 Technical Writing | Category RC | Credits 3 | Session |
| SEMESTER 2 | | RC | 4 | 1 |
| | SCB201, SCC201, SCP201 or SCP231 (Life and Physical Sciences) | | | |
| | MAT200 Precalculus (Scientific World: pre-req for MAT201) | FC | 4 | I |
| | Flexible Core Course | FC | 3 | I |
| | Unrestricted Elective: 1 credit needed if taking MAT120 and not 201 | PC | 0-1 | Ш |
| | | | | |
| | Course | Category | Credits | Session |
| | Course MAT201 Calculus I or MAT120 Statistics I | Category PC | Credits 3-4 | Session |
| ER 3 | | | | Session I |
| | MAT201 Calculus I or MAT120 Statistics I | PC | 3-4 | Session I I |
| | MAT201 Calculus I or MAT120 Statistics I SCB202, SCC202, SCP202 or SCP232 (Scientific World) | PC FC | 3-4 4 | Session I I I |
| SEMESTER 3 | MAT201 Calculus I or MAT120 Statistics I SCB202, SCC202, SCP202 or SCP232 (Scientific World) Math or Science Elective (see back) | PC FC PC | 3-4 4 4 | Session I I I II |
| | MAT201 Calculus I or MAT120 Statistics I SCB202, SCC202, SCP202 or SCP232 (Scientific World) Math or Science Elective (see back) Flexible Core Course (Urban Study) Social Science Course | PC FC PC FC PC | 3-4 4 4 3 3 | |
| | MAT201 Calculus I or MAT120 Statistics I SCB202, SCC202, SCP202 or SCP232 (Scientific World) Math or Science Elective (see back) Flexible Core Course (Urban Study) Social Science Course | PC FC PC FC PC Category | 3-4 4 3 3 Credits | |
| | MAT201 Calculus I or MAT120 Statistics I SCB202, SCC202, SCP202 or SCP232 (Scientific World) Math or Science Elective (see back) Flexible Core Course (Urban Study) Social Science Course Course LIB200 Humanism, Science & Technology (Capstone) | PC FC PC FC PC Category PC | 3-4 4 3 3 Credits 3 | |
| 4 SEMESTER | MAT201 Calculus I or MAT120 Statistics I SCB202, SCC202, SCP202 or SCP232 (Scientific World) Math or Science Elective (see back) Flexible Core Course (Urban Study) Social Science Course Course LIB200 Humanism, Science & Technology (Capstone) Math or Science Elective (see back) | PC FC PC FC PC PC Category PC PC | 3-4 4 3 3 Credits | |
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| SEMESTER | MAT201 Calculus I or MAT120 Statistics I SCB202, SCC202, SCP202 or SCP232 (Scientific World) Math or Science Elective (see back) Flexible Core Course (Urban Study) Social Science Course Course LIB200 Humanism, Science & Technology (Capstone) Math or Science Elective (see back) Math or Science Elective (see back) | PC FC PC FC PC PC PC PC PC FC ation in your | 3-4 4 3 3 Credits 3 4 4 3 | |

Start planning now for what comes after graduation! Connect with <u>Transfer Services</u> and the <u>Center for Career & Professional</u> <u>Development</u>. Also see the back of this map for more information on transfer.

LaGuardia Community College

| Credits Required to Graduate | |
|------------------------------|----|
| Category | |
| Pathways Required Core (RC) | 13 |
| Pathways Flexible Core (FC) | 19 |
| Program Core (PC) | 28 |
| Total | 60 |

More information at laguardia.edu/MathScience

Effective Fall 2022-Spring 2023 catalog. Updated: 2/18/2022

Follow the map for the catalog year in which you first enrolled. Check Degree Audit & speak to an advisor for more support.

Program Core (PC) and Pre/Co-requisites

The Program Core (PC) is the required set of major-specific courses. Refer to the Pre- and Co-requisite list below to ensure you register for the appropriate courses.

Pre-requisite: A course which must be completed <u>prior</u> to taking another course Co-requisite: A course which must be taken during the <u>same session</u> as another course.

- 1. MAT200 PRE: MAT 115/117
- 2. MAT201 PRE: MAT200
- LIB200 PRE: ENG102&103 & P/C: MAT107/115/117/119/120 (ENG103 waived for Liberal Arts: Math and Science students)
- 4. SCP231 PRE: MAT201

For a full list of pre and co-requisites, view CUNY First or the College Catalogue

Program Core Courses

<u>Math/Science Electives</u> (11-12 credits) Students are advised to complete science sequences to ensure courseto-course transfer to 4-year colleges. Select three to four courses from the following:

Mathematics: MAT120 Elementary Statistics I; MAT121 Elementary Statistics II; MAT201 Calculus (STEM); MAT202 Calculus II (STEM); MAT203 Calculus III (STEM); MAT204 Elementary Differential Equations; MAT210 Linear Algebra; MAT212 Linear Algebra and Vector Analysis; MAT221 Introduction to Probability; MAT231 Introduction to Discrete Math

Biology: SCB115 Principles of Biology; SCB201 General Biology I; SCB202 General Biology II; SCB203 Human Anatomy and Physiology I; SCB204 Human Anatomy and Physiology II; SCB208 Vertebrae Anatomy and Physiology I; SCB209 Vertebrae Anatomy and Physiology II; SCB252 Fundamentals of Biotechniques; SCB255 Cell Biology; SCB260 General Microbiology; SCB265 Ecology

<u>Chemistry</u>: SCC201 General Chemistry I; SCC202 General Chemistry II; SCC251 Organic Chemistry I; SCC252 Organic Chemistry II

<u>Geography</u>: SCG120 Introduction to Oceanography; SCG150 Introduction to Geographic Information Systems

<u>Physics</u>: SCP201 Fundamentals of Physics I; SCP202 Fundamentals of Physics II; SCP231 General Physics I; SCP232 General Physics II; SCP233 Intro to Modern Physics

Experiential Learning: **SCI204** Research in Natural Sciences; **LIB204** Experiential Learning in Liberal Arts

Pathways Requirements & Transfer

<u>LEARNING COMMUNITIES</u> All Liberal Arts students, especially in the first semester, are highly encouraged to enroll in a learning community. For more information: <u>https://www.laguardia.edu/clusters/</u>

<u>PATHWAYS REQUIRED CORE</u> Pathways is CUNY's general education framework. For Required Core, students must take 2 English courses, 1 Mathematics and Quantitative Reasoning course, and 1 Life and Physical Sciences course. For more details, visit the <u>Pathways Required Core</u> <u>website</u>.

<u>LIFE AND PHYSICAL SCIENCES</u> This program requires you to take Fundamentals in Biology (SCB201), Chemistry (SCC201) or Physics (SCP201); or General Physics I (SCP231).

<u>PATHWAYS FLEXIBLE CORE</u> allows students to choose courses based on interests, transfer or career plans, or for general exploration. Associate of Science students must take one course from each category listed below, plus an additional course from any category. View DegreeWorks or our <u>Pathways website</u> to see a full range of options, or talk with the program director or an advisor. <u>Note: your</u> <u>program has specific requirements listed below</u>.

- Creative Expression
- Individual & Society
- Scientific World: MAT200 required
- U.S. Experience in its Diversity
- World Cultures and Global Issues
- Additional (Scientific World): Second Biology, Chemistry or Physics course required – SCB202, SCC202, SCP202 (Fundamentals) or SCP232 (General Physics) (note: students must first complete Calculus I to take General Physics)

<u>TRANSFER</u> Students who complete the Liberal Arts: Math and Science program at LaGuardia typically transfer to 4year colleges to complete BA or BS degrees in Natural Sciences fields such as Biology, Chemistry, or Physics, or Mathematics, or Pre-Med and Clinical Health programs.