

Operations & Analytics, BSBA

Recent shifts in product and service markets have resulted in an unprecedented demand for professionals who can successfully apply central principles of operations and technology management.

The Operations and Analytics major provides students with the necessary analytic, quantitative, and technological STEM skills to analyze business problems and to devise innovative and practical solutions. Course content within the major will include practical applications around operations, analytics and systems (STEM).

Requirements

Major Requirements

Code	Title	Credits
Required Courses		
OPAN 3258	Decision Support Systems	3
OPAN 3280	Global Supply Chain Management	3
Elective Courses		
Select 9 elective credits – Students must take 6 credits from Section A & 3 credits from Section A or B		9
Section A: OPAN Courses:		
OPAN 3241	Data Science	
OPAN 3242	Applied Data Viz for Sports	
OPAN 3243	Intro Bus App Dvlpmnt in Python	
OPAN 3244	Mgmt Bus App Dvlpmnt in Python	
OPAN 3256	Digital Technologies&Analytics	
OPAN 3257	Develop/Managing Data Bases	
OPAN 3261	Analytics Advantage	
OPAN 3271	Environ Sustn Ops & Bus Models	
OPAN 3273	Bus Modeling Using Regression	
OPAN 3274	Time Series Forecasting	
Section B: Cross-Disciplinary STEM Courses:		
COSC 1020	Computer Science I	
COSC 1030	Computer Science II	
MARK 3241	Customer Valuation	
MARK 3243	Customer Analytics	
Any other COSC course or other OPAN-Area approved STEM designated course ¹		
Total Credits		15

¹ AP/IB credit in COSC cannot count towards the OPAN major Section B requirement.

MSB Core Curriculum

The MSB required University Core, Liberal Arts, and BSBA Business Core requirements are as follows:

Specific MSB University Core Requirements

Code	Title	Credits
WRIT 1150	Writing and Culture	3-4
Integrative Writing		
BADM 1101	Freshman Seminar	3
or BADM 2099 Intro to Research in Business		
or BADM 4090 Global Business Experience		
or BADM 4998 Senior Thesis I		
or MARK 3229 Marketing Across Borders		
or MGMT 3200 Communicating for Bus Leadsph		
or MGMT 3205 The Culture Lab		
or MGMT 3260 Leading People & Teams		
or MGMT 3277 Imagination and Creativity		
or STRT 3255 Moral Foundations of Market Soc		
Humanities: Art, Literature, Music and Media		
One course with the HALM attribute. This course must be taken at Georgetown.		3
Philosophy & Ethics		
STRT 2101	Ethical Values of Business	3
One course with the 'Core: Philosophy/General' attribute ¹		3
Theology & Religious Studies		
THEO 1000	The Problem of God	3
or THEO 1100 Intro to Biblical Literature		
One class with the 'Core: Theology' attribute		3
Science for All		
One course with the 'Core: Science for All' attribute taken at Georgetown. Courses taken for AP or IB credit do not count for this requirement.		3
Quantitative Reasoning & Data Literacy		
ACCT 2101	Mgmt Acct for Decision Making	3
Pathways to Social Justice		
CPSJ 1000	Race, Power, and Justice at GU	1
or CPSJ 1001 Race, Power, and Justice at GU		
or CPSJ 1002 Race, Power, and Justice at GU		
or CPSJ 1003 Race, Power, and Justice at GU		
Two courses with the 'Core: Pthwys to Social Justice' attribute		6

¹ Please note that seniors are not permitted to take an intro-level philosophy or ethics course and McDonough students should not take PHIL-1100: Intro to Ethics. Students in the BSBGA major (<http://coursecatalog.georgetown.edu/programs/business-global-affairs-bs/>) can take PHIL-1900: Political & Social Thought as their general philosophy course.

Liberal Arts Core for BSBA Students

Code	Title	Credits
Economics		
ECON 1001	Econ Principles Micro ¹	3
ECON 1002	Econ Principles Macro ¹	3
Mathematics		
MATH 1350	Calculus I	4
History/Government		
HIST		6

GOVT²INAF³**Liberal Arts Electives****21**

Liberal arts electives may be selected from courses offered outside of the Business School in disciplines such as the humanities, social sciences, natural sciences, mathematics, languages, and the arts.⁴

¹ McDonough students with a score of 4 on both Advanced Placement (AP) exams (Micro and Macro) are allowed to take ECON 1003 and one additional upper-level ECON course should be completed by the end of the second year.

For a score of 5 on the Microeconomics AP exam, the student will receive three credits for ECON-1001: Principles of Microeconomics. For a score of 5 on the Macroeconomics AP exam, the student will receive three credits for ECON-1002: Principles of Macroeconomics. Students with a score of 5 on both of the AP exams may proceed to upper-level courses and cannot take any of the principle courses (ECON-1001, 1002 and 1003). Students with a score of 5 on only one of the AP exams normally take the opposite principles course. If the student takes ECON-1003: Principles of Economics: Macro and Micro, they will forfeit the AP credit in economics.

² except GOVT 2201

³ Any classics or INAF course taken to fulfill this requirement must be approved by the Undergraduate Programs Office prior to registration for the course

⁴ Most courses offered outside of the Business School satisfy this requirement; however, UNXD courses do not count toward liberal arts elective credit. Students may apply a maximum of two ECON courses (6 credits) beyond the principles level toward the seven required liberal arts electives.

Business Core

Code	Title	Credits
ACCT 1101	Intro to Financial Accounting	3
ACCT 2101	Mgmt Acct for Decision Making	3
ACCT 1181	Business Law	3
	or STRT 2265 Business-Govt Relations	
	or BGAF 1001 Global Markets and Politics	
OPAN 1101	Computational Busn Model	1
OPAN 2101	Business Statistics ¹	3
MARK 1101	Principles of Marketing	3
MGMT 1101	Management & Org Behavior	3
STRT 2101	Ethical Values of Business	3
FINC 2101	Business Financial Management	3
OPAN 2201	Modeling Analytics	3
OPAN 3101	Operations Management	3
STRT 3101	Strategic Management	3

¹ Students with AP Stat credit or STAT coursework from prior schools will take OPAN 2102 instead.

Georgetown Core Curriculum

The Georgetown Core Curriculum (Georgetown Core) is a distinctive expression of Georgetown University's identity as a student-centered

research university rooted in the Jesuit and Catholic tradition. The Georgetown Core is a two-tiered program. The first tier – the “shared core” – has been created and approved by the Main Campus Core Curriculum Committee and is shared by all undergraduates as a common core experience. The second tier of the requirement – the “school-specific core” – is designed and determined by each of the undergraduate schools, embodying the shared learning goals of the university Core while furthering the specific mission and tradition of each school. Both the shared and school-specific cores change over time, balancing the traditional ethos of a liberal arts education with the changing needs of our students in a changing world. Ultimately, it is the hope that the entirety of a Georgetown education – the cores, majors and minors, and electives – will lead students to embody as life-long habits the goals described in the Georgetown Core Curriculum Learning Goals (<http://coursecatalog.georgetown.edu/academics/undergraduate-regulations/georgetown-core-curriculum-requirements/georgetown-core-curriculum-goals/>).

More information about the Georgetown Core Curriculum can be found on the Provost's Core Curriculum website (<https://provost.georgetown.edu/core-curriculum/#University%20Core%20Requirements>).

Georgetown Shared Core Requirements

The core requirements that form the first tier, the common experience across the University, are outlined below. Georgetown courses fulfilling each of these requirements are designated “Core: [specific requirement]” in the Attributes in the Schedule of Classes (<https://schedule.georgetown.edu/>).

Philosophy – 2 Courses

Through the Core, the Philosophy Department is committed to providing courses that promote students' personal growth as human beings in search of meaningful lives, foster their development as responsible citizens, and offer effective introductions to the discipline of philosophy. The learning goals shared by courses in the Philosophy Core are:

- Understand what philosophy is, how it differs from other academic disciplines, and what its primary areas of inquiry are.
- Understand and construct arguments.
- Describe and analyze complex problems.
- Read, write and speak effectively.
- Engage critically and constructively with moral problems and decisions.
- Apply philosophical analysis, argumentation, and critical reflection to the study of other disciplines.

Please refer to each school/college curriculum for specific courses that will fulfill this requirement.

Theology and Religious Studies – 2 Courses

Through the Core, the Theology and Religious Studies Department is committed to fostering in students a critically appreciative awareness of the religious dimension of human existence, and to assisting students in reflecting upon their own experience and understanding in that enlarged context. The first course provides this foundation while the second course allows students to develop their critical awareness by applying it to a particular area of interest in religion or theology.

The learning goals shared by courses in the Theology and Religious Studies Core are:

- To consider reflectively your relationship to the world, your fellow humans, and God.
- To foster a critically appreciative awareness of the religious dimension of human existence.
- To assist you in reflecting upon your own experience and understanding in that enlarged context.
- To develop your critical awareness by applying it to a particular area of interest in religion or theology.

Problem of God¹ (THEO 1000) and one Theology and Religious Studies elective fulfill the Theology and Religious Studies requirement. Introduction to Biblical Literature (THEO 1100) may be substituted for Problem of God or may be used as an intermediate level elective.

¹ Transfer students are exempt from the Problem of God requirement and may select any two intermediate level courses, including Introduction to Biblical Literature, to fulfill the core requirement in Theology & Religious Studies.

Writing – 2 Courses

The writing requirement provides students with opportunities to connect their writing with critical reading and thinking, inquiry, and analysis. The Writing and Culture Seminar, WRIT 1150, approaches writing through three interrelated frameworks: writing as a tool for inquiry, writing as a process, and practice writing in different rhetorical situations. Each section focuses on a cultural theme, with readings and assignments that engage students with compelling questions and problems. Seminar readings provide texts for analysis as well as models and motives for student writing. Students are encouraged to complete this course during their first year at Georgetown. The learning goals shared by different sections in the Writing and Culture Seminar are:

- Experiment with diverse strategies for planning, drafting, and revising writing.
- Adapt writing to respond to, engage, and persuade audiences.
- Employ rhetorical strategies for analyzing, designing, and communicating in writing and other forms of media.
- Engage in writing as a form of thinking, inquiry, and learning.

The second half of the Writing Core is an intensive writing experience located within the student's chosen major, embedded within the requirements as determined by that program. Each major's Integrated Writing requirement is established by the department or program in order to express the unique conventions and practices of the discipline. The learning goals shared by courses in the Integrated Writing Core are:

- To prepare students to use the relevant forms, styles, and conventions of writing within their chosen major(s).
- To employ writing as a method to enhance students' learning of concepts, materials, and methods in their major.

Courses fulfilling this requirement are identified within each major.

Humanities: Art, Literature, Music, and Media (HALM) – 1 Course

(Formerly Humanities: Art, Literature and Culture (HALC))

The Humanities: Art, Literature, Music, and Media (HALM) requirement serves to deepen students' understanding and experience of a range of creative media representing cultural expressions from various historical periods and world regions, from the local to the global.

Through reading, listening, viewing, analyzing, writing, and/or creative practice, students acquire the intellectual and practical tools to interpret human experiences portrayed in the arts, literature, music, and media.

HALM Learning Goals:

- Understand how art, literature, music and/or media have historically shaped and been shaped by cultures.
- Develop generative habits of mind and exercise critical thinking skills for a world in flux: openness, resilience, curiosity, creativity, imagination.
- Activate knowledge through creative, analytical, and/or critical approaches in individual, collaborative, and/or public-facing projects.

HALM courses must be Georgetown University courses and cannot be fulfilled by transfer credits; they must be 3-credit courses. Courses that can fulfill other Core requirements (such as HIST, PHIL, THEO) are ineligible.

In 2026-27, the older "HALC" designation (Humanities: Arts, Literature, and Culture) will be replaced with HALM (Humanities: Arts, Literature, Music and Media). For this academic year, courses with the designation will be tagged with both HALC and HALM. In Fall 2027, the tag HALC will be retired in favor of HALM.

Science For All – 1 Course

The natural sciences, and the technologies that they enable, are woven deeply into the fabric of our lives and are central to many of the important political and social challenges that we face. They are also pinnacles of intellectual accomplishment in humanity's ancient and ongoing quest to understand the world in which we live. Thus we believe that to function as liberally educated, ethically responsible citizens, as stewards of the planet, and as effective leaders, all Georgetown students should understand scientific modes of thought and concepts, both in the abstract and as they are exemplified in at least one major area of scientific inquiry. The Science For All (SFA) Core requirement is grounded in these beliefs. The learning goals shared by courses in the Science for All Core are:

- To understand the basic principles and some current research challenges of one or more areas of science.
- To understand science as a set of methods of inquiry that involve forming and testing hypotheses through the analysis of quantitative and qualitative data.
- To consume and interpret scientific information with critical understanding of the balance of certainty and uncertainty that research findings inevitably reflect.

Quantitative Reasoning and Data Literacy – 1 Course

This requirement applies only to students in the class of 2028 and later.

The Quantitative Reasoning and Data Literacy (QRDL) requirement will help students learn to understand how real-world interpretation of data progresses from a set of numbers, frequently incomplete and with measurement errors, to a visual distillation that clearly conveys meaning. While mathematics and statistics provide a necessary foundation for quantitative reasoning and data literacy, the power of pure mathematics lies in its abstraction. In contrast, QRDL emphasizes a distinctive variety of concrete contexts and applications. The learning goals shared by courses in the Quantitative Reasoning and Data Literacy Core are:

- To build a quantitative toolbox that allows students to become comfortable performing and/or evaluating quantitative analyses.
- To translate and make meaning of data and quantitative analyses as they apply to complex problems.
- To effectively communicate statistical methods and results both visually and textually to a diversity of audiences with considerations to contextual, social, or ethical issues.

Engaging Diversity/Pathways to Social Justice

For students in the class of 2025, 2026, or 2027

Engaging Diversity (2 courses)

All Georgetown students are required to take two Engaging Diversity courses as overlays, meaning that the courses may count toward another degree requirement (Core, major, or minor). One of these courses must be labeled with a “Core: Diversity Domestic” attribute and one must be labeled with a “Core: Diversity Global” attribute.

In courses designated as fulfilling a diversity requirement, students will engage with different cultures, beliefs, and ideas. These courses will explore conditions that contribute to unequal access and influence. Finally, these courses should enable students to reflect on their own identities as they also deepen their understanding of the experience of others. The learning goals shared by courses in the Engaging Diversity Core are:

- To prepare students to be responsible, reflective, self-aware and respectful global citizens through recognizing the plurality of human experience and engaging with different cultures, beliefs, and ideas.
- To be better able to appreciate and reflect upon how human diversity and human identities shape our experience and understanding of the world.

For students in the class of 2028 and later

Pathways to Social Justice (3 courses)

Georgetown’s Pathways to Social Justice (PSJ) curriculum prepares students to critically analyze historical and contemporary power differentials. By fulfilling the Pathways to Social Justice requirement, students will gain a better understanding of how social, political, geographic, economic, and other cultural factors shape experiences of the world, as well as how these factors contribute to marginalization and inequality. PSJ courses will also explore how communities have resisted marginalization, and will focus on axes of identity that have

formed the basis for historical and contemporary marginalization and oppression, including race, gender, class, caste, disability, religion, sexual orientation, and gender identity.

A cornerstone of this requirement is the one-credit University Seminar in Race, Power, and Justice which is designed to ensure that every student at Georgetown develops a baseline vocabulary for discussing racial difference and marginalization. This seminar will provide the foundation for each student’s engagement with other PSJ-attributed “overlay” courses offered across Georgetown’s Main Campus and should be taken in the first year.

In addition to the required one-credit University Seminar in Race, Power, and Justice, the requirement also requires students to take two overlay courses (meaning that these courses may count toward another degree requirement, whether core, major, or minor). Eligible courses have the “Core: PSJ” attribute.

Each course in the Pathways to Social Justice Core works toward at least three of these shared priorities:

- Inclusive Scholarship
- Intersectional Approaches to Identity
- Historical Legacies of Inequality and Their Contemporary Impacts
- National, Regional, and Global Comparisons
- Imagining Justice