

GRANTHAM UNIVERSITY



Bachelor of Science in Computer Science

STUDENT DATA:

NAME: Jonathan Sample

ID: SYS-312679580

General Education

	Credit Required	Potential Credit
Student Success (GU 100)	1.00	0
<p>This required one-credit hour course introduces Grantham students to various strategies for learning and helps develop skills essential for succeeding in an online education program. Students complete selfassessments to become familiar with their learning styles and how to use their learning styles in online studies. Students successfully completing this course are more proficient in time management, reading skills, writing techniques, memory abilities, and test-taking strategies. Students learn how to navigate within Grantham University's online course learning environment, submit assignments, and where to go for academic assistance. GU100 is normally taken with level 100 or 200 courses that offer the most common challenges in working in an online learning environment. Students complete assignments in both courses simultaneously as a learning strategy for general education and entry-level knowledge acquisition while developing successful online study skills. Successful completion of G</p>		
	Credit Required	Potential Credit
English Composition I (EN 101)	3.00	3.00
<p>This course develops written communication skills with emphasis on understanding the writing process, analyzing readings and</p>		

practicing writing for personal and professional applications.

ENGL 101 Introduction to Writing University of Maryland LL 3.00
University College

**Credit
Required** **Potential
Credit**

Introduction to Public Speaking (CO 101) 3.00 0

This course provides students with a broad overview of public speaking, including such topics as audience analysis, idea generation and development, speech organization and speech delivery. Topics include how to outline speeches, create effective introductions and conclusions, use appropriate language and control nervousness. In addition, students examine guidelines for and practice delivering informative and persuasive speeches.

**Credit
Required** **Potential
Credit**

Introduction to Computer Applications (CS 105) 3.00 3.00

Students are introduced to basic computer concepts as well as techniques and tools for folder and file navigation and manipulation. Students explore the fundamentals of an office productivity suite, developing skills in word processing, spreadsheet and presentation applications.

Computer systems and applications AR-1402-0168 LL 3.00

**Credit
Required** **Potential
Credit**

American Government I (GP 210) 3.00 0

This undergraduate course provides an introduction to American government and politics. Topics include the concept of a constitutional democracy, federalism, first amendment rights, equal rights under the law, political culture, political ideology, interest groups, lobbying, and political campaigns and elections.

**Credit
Required** **Potential
Credit**

Strategies for Decision Making (HU 260) 3.00 0

This course is about becoming a better thinker in every aspect of your life: in your career, and as a consumer, citizen, friend, parent, and lover. Discover the core skills of effective thinking; then analyze your own thought processes, identify weaknesses, and overcome them. Learn how to translate more effective thinking into better decisions, less frustration, more wealth - and above all, greater confidence to pursue and achieve your most important goals in life.

**Credit
Required** **Potential
Credit**

College Algebra (MA 105) 3.00 3.00

An introductory level course on the fundamental concepts of algebra. Topics include equations, polynomial and rational functions and graphing, and exponential and logarithmic functions.

MATH 107 College Algebra

University of Maryland
University College

LL

3.00

**Credit
Required**

**Potential
Credit**

PreCalculus (MA 141)

3.00

0

An intermediate level mathematics course on the basics of algebra and trigonometry. Topics include factorization, powers and exponents, radicals, quadratic equations, inequalities and absolute value, progressions, graphing, introduction to limits, and basic trigonometry.

**Credit
Required**

**Potential
Credit**

Physics I (PH 220)

4.00

0

This course provides an introduction to college physics, using an algebra-based approach. It is intended for students majoring in information systems, software engineering technology, computer science, computer engineering technology, and electronics engineering technology. The course covers a range of topics, concepts, and theories in general physics including kinematics and dynamics in 1D and 2D motion, forces and Newton's laws of motion, work and energy, impulse and momentum, rotational kinematics and dynamics, simple and harmonic motion, fluid dynamics, and temperature and heat. The course also introduces the student to applied physics and applies this to real-world problems of engineering. Includes one (1) lab credit.

**Credit
Required**

**Potential
Credit**

Introduction to Life Science (GS 102)

3.00

0

This course provides a broad overview of biological processes. Topics include the anatomy of the cell, cell division, species diversity and species classification. This course relates the subject matter to everyday occurrences.

**Credit
Required**

**Potential
Credit**

Humanities and Fine Arts Electives

6.00

3.00

Students may choose any of the following Humanities and Fine Arts courses:

Introduction to Modern Art (AR201)

Modern Art in the U.S. (AR301)

Ancient Art: Tombs and Treasures (AR310)

Engineering and Ethics (EE100)

Survey of American Literature I (EN301)

Survey of American Literature II (EN302)
 Literature of the Western World I (EN405)
 Introduction to Philosophy (PL201)
 Practical Philosophy (PL301)
 Philosophy of Science & Technology (PL401)

Please visit the Grantham University catalog for a description of each course.

DANT-0018 Ethics in America	DSST	UL	3.00
		Credit Required	Potential Credit
Communications Elective		3.00	3.00

Students may choose any of the following Communication courses:

Interpersonal Communication (CO120)
 Conflict and Communication (CO201)
 Business Communication (CO210)
 English Composition II (EN102)
 Technical Writing (EN361)

Please visit the Grantham University catalog for a description of each course.

ENGL 102 Composition and Literature	University of Maryland University College	LL	3.00
		Credit Required	Potential Credit
Behavioral and Social Sciences Electives		6.00	6.00

Students may choose any of the following Behavioral and Social Sciences courses:

American Government II (GP215)
 Contemporary Political Issues (GP310)
 World History: Ancient to Renaissance(HS101)
 World History: Reformation to Present (HS102)
 U.S. History: Pre-Columbus to Civil War (HS201)
 U.S. History: Post Civil War to Present (HS202)
 Great Commanders (HS215)
 Fundamentals of Psychology (PS240)
 Abnormal Psychology (PS260)
 Psychology and the Law (PS280)
 Introduction to Sociology I (SO101)
 Baseball and the American Experience (SO103)
 Introduction to Sociology II (SO106)
 Social Anthropology (SO203)
 Cultures in Conflict (SO210)
 Technology and Society (SO251)
 Geography (SS106)

Please visit the Grantham University catalog for a description of

each course.

- Introduction to Criminal Justice (CJ 101)
- Introduction to Criminology (CJ 102)
- American Government II (GP 215)
- Fundamentals of Psychology (PS 240)
- Abnormal Psychology (PS 260)
- Psychology and the Law (PS 280)
- Introduction to Sociology I (SO 101)
- Introduction to Sociology II (SO 106)
- Geography (SS 106)
- Microeconomics (BA 201)
- Macroeconomics (BA 206)

Visit the GU website for a description of these courses.)

HIST 156 History of the United States to 1865	University of Maryland University College	LL	3.00
TA014 GENERAL PSYCHOLOGY	Clep Subject	LL	3.00

Program Core

	Credit Required	Potential Credit
Calculus I (MA 302)	4.00	0

An introductory-level course that includes topics on limits, derivatives, derivative tests, concavity, applications of the derivative and integration, area under the curve, the fundamental theorem of Calculus, and integration techniques using parts and substitution.

	Credit Required	Potential Credit
Calculus II (MA 312)	4.00	0

An advanced Calculus course on integration, differential equations, parametric equations, polar coordinates, conic sections, dot and cross products, quadratic surfaces, partial derivatives, double and triple integrals, and vector calculus

	Credit Required	Potential Credit
Programming Essentials (CS 192)	3.00	0

This course introduces students to problem-solving concepts that programmers need to know and understand to skillfully use any programming language. Throughout this course students use language-independent problem-solving methods to structure logic (sequencing, branching, repetition), and data (records, objects). Students will also use diagramming and charting methods to communicate solutions and use arrays, menus, and flow charts to communicate structured programming solutions.

	Credit Required	Potential Credit
Programming in HTML (CS 197)	3.00	0

This course covers the basics of mastering Hypertext Markup Language (HTML) and Extensible Hypertext Markup Language (XHTML). Topics include creating a web page, use of links, tables, scripting for HTML, adding graphics, and multimedia. The course will cover advanced topics such as creating frames, forms, and Cascading Style Sheets. Upon successful completion of this course, the student will be able to design, create, and maintain pages on the World Wide Web.

	Credit Required	Potential Credit
Programming in Java (CS 200)	4.00	0

This is a beginner- to intermediate-level programming course devoted to object-oriented programming using Java. Topics include object-oriented programming, classes and instances, looping, arrays, flow control, packages, interfaces, streams, files, and applying advanced graphical user interface elements. In addition to Java applications programming, the course introduces Java applet programming. The fundamental principles of object-oriented programming are covered, as well as a number of advanced topics. The course makes extensive use of Sun Microsystems\' Java 2 Software Development Kit (SDK) and a variety of online resources

	Credit Required	Potential Credit
Programming in JavaScript (CS 208)	4.00	0

This introductory course provides students with hands-on practice using JavaScript. Topics include integration of JavaScript and HTML to make web pages interactive, language semantics including functions, objects, methods, forms, frames, and event handlers. Course provides comprehensive coverage of both client and server-side JavaScript. Includes projects and computer laboratory exercises.

	Credit Required	Potential Credit
.NET Concepts and Principles (IS 212)	4.00	0

This course is an intermediate computer science course presenting the fundamental concepts and principles of Microsoft\'s Visual Basic (now known as .NET) application infrastructure. This course is intended to be the first part of two. The first course focuses on essential concepts and fundamental principles of .NET, while the second course will emphasize implementation of .NET using multiple languages. This course is designed to be more abstract in nature, focusing on what makes up .NET, and how those

components interact in the context of application development. The course requires any coding as such, though some of the course exercises may require the generation of some limited pseudo-code or flow diagrams.

	Credit Required	Potential Credit
.NET Implementation (IS 412)	4.00	0

This course is an advanced computer science course presenting the concepts and principles of Microsoft\'s Visual Basic (now known as .NET implementation). This course is the second part of the student\'s .NET instruction. The first course focuses on essential concepts and fundamental principles of .NET, while the second course emphasizes implementation of .NET using multiple languages. The course requires coding as students will design, implement, and deploy Visual Basic .NET applications.

	Credit Required	Potential Credit
Computer Networks (CS 216)	3.00	3.00

Students are provided an introduction to networking technologies including local area networks (LANs), wide area networks (WANs), protocols, topologies, transmission media, and security. In addition to introducing a variety of fundamental concepts, the course encompasses in-depth aspects of networking including the Internet protocol suite (TCP-IP).

Computer network fundamentals	AR-1402-0168	LL	3.00
	Credit Required	Potential Credit	

Database Applications (IS 259)	3.00	0
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Students develop a working knowledge of database applications using Microsoft Access software. Topics include designing, creating, editing, sorting, indexing, and searching database files; creating custom queries, tables, forms, reports; and publishing to the Internet using Data Access pages.

	Credit Required	Potential Credit
Programming in C (CS 263)	4.00	0

This course is an introduction to programming using C. Topics include flow of control, functions and structured programming, pointers, arrays, file manipulation, and an introduction to C++. Includes one (1) lab credit. Software: C compiler or interpreter and debugger.

	Credit Required	Potential Credit
Programming in C++ (CS 265)	4.00	0

An introduction to C++ programming. Topics include control structures, arrays, pointers, classes, overloading, inheritance, file processing, and data structures. Includes one (1) lab credit. Software: Microsoft Visual Studio.Net.

	Credit Required	Potential Credit
Data Structures (CS 270)	3.00	0

The objective of this course is to teach the student the data structures of the C++ language. The course will cover topics such as structured template libraries, binary search trees, graph algorithms, and searching and sorting.

	Credit Required	Potential Credit
Systems Analysis & Design (CS 336)	4.00	3.00

This intermediate course teaches the fundamentals of Systems Analysis and Design. Topics studied include phases of the system development life cycle, business information systems concepts, feasibility studies, data flow diagrams, CASE tools, data security, and software engineering.

CMIS 270 Intro Computer Systems and Architecture	University of Maryland University College	LL	3.00
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	Credit Required	Potential Credit
Database Design (CS 371)	4.00	0

This course is an intermediate computer science course that presents the fundamental concepts of database systems. Topics include the evolution of database management systems from file systems, hierarchical, networks, and relational database models. Relational, entity-relationship modeling, normalization, and aspects structured query language (SQL) also are covered as well. Further advanced topics include conceptual design, design verification, logical database design, physical database design, as well as implementation and maintenance issues.

	Credit Required	Potential Credit
Software Engineering (CS 405)	4.00	0

An advanced course that covers the basics of software engineering. This is not a programming course, but rather an integration of several computer science disciplines that includes the study of project planning, techniques, tools, languages, computer-aided software engineering, and techniques for planning a software engineering career.

	Credit Required	Potential Credit
Computer Science Electives (300 level or higher)	8.00	4.00

(Select eight CS credits of which all must be 300 level or higher course, unless the minimum requirement of 36 semester hours of upper level courses has been met elsewhere in this degree. Visit the GU website for a complete listing and description of courses. College credit for military training may apply.)

Security management	NATL-IRS-5052	UL	1.00
Information security management	AR-1402-0168	LL	3.00
		Credit Required	Potential Credit
Free Electives		15.00	15.00

(College credit for professional training or college credit-by-examination may apply. See the Grantham University catalog for a complete listing of courses available for you to consider.)

Digital communications systems	AR-1402-0168	LL	3.00
PC Maintenance and Repair	AR-1402-0168	LL	3.00
Computer operating systems	AR-1402-0168	LL	3.00
First aid	AR-2201-0399	LL	1.00
Marksmanship	AR-2201-0399	LL	1.00
Military science	AR-2201-0399	LL	2.00
Physical conditioning	AR-2201-0399	LL	2.00

Excess or Duplicate Credit

TOTAL		126.00	46.00
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Thank you for using Degree Quest, the state-of-the-art degree exploration system that digitally connects you to hundreds of colleges and universities offering thousands of degrees on campus or at a distance from Associate's degrees to Ph.D's. This document is an UNOFFICIAL Degree Plan to provide you with a preliminary projection of how your prior learning experiences may fit into the specified degree program for this academic institution. If you choose to pursue this degree option, you must have official transcripts sent to this institution on admission, after which they will make the final decision on your student status.

ACCEPTANCE OF CREDIT:

The acceptance of the transfer of credit is at the sole discretion of this institution. It is up to the pending academic review by the registrar to verify and validate the courses, the transferability of the courses, and the placement of the courses within the chosen degree plan.

ACCEPTANCE OF NON-TRADITIONAL CREDIT:

The acceptance of non-traditional credit is at the sole discretion of this institution. Non-traditional credit includes, but is not limited to: credit-by-examination, portfolio credit, and professional/military training.

Please consult with your academic advisor at this institution to ensure the transferability and applicability of all credit-by-examinations suggested in this degree plan. All students are advised to consult their academic advisors before taking

any credit-by-examination or completing a portfolio.

This document is an UNOFFICIAL Degree Plan to provide you with a preliminary projection of how your prior learning experiences may fit into the specified degree program for this academic institution. If you choose to pursue this degree option, you must present it to a college representative, at this institution who will review it for the following:

- Accurate representation of the college's degree program requirements, including course numbers and titles, credit hours for each course, lower- and upper-level course requirements, and the total number of credits needed for the degree.
- Appropriate assignment of non-traditional credit at the lower or upper level for corporate professional training, military service schools and occupations, CLEP, DSST, and other tests, transfer credit for courses from other colleges and universities, certification programs, if applicable.

Credit for all courses you have taken must be reflected on official transcripts sent directly to this institution from the administrative offices of the colleges and universities you previously attended when you seek formal admission. This degree plan is typically used for information purposes by institution's counselors pending receipt of the official transcripts from the source colleges and universities.

DEGREE PLAN LEGEND:

SH = Semester hours (or QH = Quarter Hours)

LL = Lower Level, i.e. courses at the Freshman/Sophomore level

UL = Upper Level, i.e. courses at the Junior/Senior level

GL = Graduate Level (sometimes recommended by ACE for very complex courses)

SCHOOL NOTES:

Grantham University General Information:

Grantham University, established in 1951, offers certificates, undergraduate degrees and graduate degree programs in:

Certificates: Project Management, Business Leadership, Human Resources, Cybersecurity Concepts, Introduction to Programming, Entrepreneurship, Advanced Cybersecurity, PM Grad, HR Grad, Parapro, and Medical Admin Assistant

Undergraduate: Accounting, Business Administration, Business Management, Human Resource Management, Financial Planning, Criminal Justice, General Studies, Multidisciplinary Studies, Computer Engineering Technology, Computer Science, Information Systems Security, Electronics and Computer Engineering Technology, Electronic Engineering Technology, Engineering Management Technology, RN to BSN, Health Systems Management, and Medical Coding and Billing

Graduate: Business Administration, Business Administration-Information Management, Business Administration-Project Management, Business Intelligence, Performance Improvement, Case Management (MSN), Nursing Education (MSN), Nursing Management and Organizational Leadership (MSN), Health Systems Management (MS), Healthcare Administration (MHA), Information Management-Project Management, Information Management, Technology, and Information Technology.

Grantham University developed as part of the traditional college and university movement of the late 20th Century. In 1951, Grantham opened its main campus in Southern California. As interest in Grantham's degree programs extended beyond its campuses, the

college developed distance education programs to serve a geographically dispersed student body. As the demand for distance education increased, the University consolidated its residential campuses into one location just outside New Orleans, Louisiana in 1991. In the late '90s it began offering degree programs exclusively online until Hurricane Katrina devastated the Gulf Coast region on August 29th, 2005, destroying over eighty percent of Grantham University's buildings. Fortunately, Grantham University had been planning to open a satellite campus in Kansas City, Missouri. As a result of Katrina, those plans were accelerated and the move to Kansas City occurred seven days after the hurricane hit.

ACCREDITATION:

Grantham University is accredited by the Distance Education Accrediting Commission (DEAC). Distance Education Accrediting Commission is listed by the U.S. Department of Education as a nationally recognized accrediting agency.

TUITION & FEES:*

Tuition:

Undergraduate Tuition: \$265/credit hour
Military & Veteran Tuition: \$250/credit hour
Graduate Tuition: \$325/credit hour

Fees:

Technology Fee: \$35 each term

Scholarships:

Grantham offers over many different scholarships for qualified students. These scholarships include Military Family Scholarship, Veteran Scholarship, Military Scholarship, Corporate Partner Scholarships and more. In addition to the many Scholarships offered by the institution. Grantham also offers a Book Grant to any Military, Veteran, Military Family Member, or First Responder who meets the Grant Qualifications.

*This is only a general listing of the tuition and fees, of which Grantham University reserves the right to modify without prior notice. All costs listed are subject to change. To view a complete listing of the most recently posted schedule of tuition and fees, please visit the website.

CONTACT INFORMATION:

Grantham University
16025 W 113th Street
Lenexa, KS 66219

Phone: (888) 947-2684

Web: www.grantham.edu

While we strive to provide only the most accurate information, all of the information in this degree plan should only be used as an unofficial, preliminary comparison tool. We cannot guarantee the accuracy of the information presented. Additional information—such as potentially unlisted rankings and accreditations, availability of courses, licensure requirements, etc.—may need to be researched by the customer for a complete comparison. All student are encouraged to speak with the schools directly for the most complete and accurate information.

DEGREE POLICY NOTES:

Transfer Credit Policy

* A minimum grade of C is required to receive transfer credit from another institution

* The student must complete at least 25% of the required credit hours with courses from Grantham to earn the Associate degree

* The student must complete at least 25% of the required credit hours with courses from Grantham to earn the Bachelor's degree

* Grantham awards advanced standing to qualified applicants. Prior college, military training, employer courses, and equivalency exams such as CLEP, DSST, and Challenge Tests may be used to obtain credit in lieu of course and credit hour requirements.

* Grantham awards credit on a course-by-course basis. Grantham awards credits for courses with equivalent content and value as the corresponding Grantham course(s), and for which the student earned a grade of C or higher.

COST SAVINGS:

This institution values non-traditional learning experiences and awards credit for college level examinations, military training and experiences, corporate and government training; thereby saving students a substantial amount of time and money. In fact, we project 31 hours of college credit for your non-traditional learning may be applied to this degree, thereby saving you 589 hours of classroom time, \$8,215.00 in tuition, and approximately \$1,023.00 in textbook and material costs.

FINANCIAL AID NOTE:

Financial Aid Note: You may want to consider seeking federal financial aid in the pursuit of this degree. To request grants or loans from the federal government, you should visit <http://www.fafsa.ed.gov> or call their toll-free number at 1-800-4FED-AID (1-800-433-3243) or 1-319-337-5665. If you are hearing-impaired and have questions, please contact the TTY line at 1-800-730-8913. When submitting the Free Application for Federal Student Aid (FAFSA), you will be asked for the federal school code for the college or university that you want to attend. The identification number for this institution is 041223. Note: You do not have to be a U.S. citizen to receive federal financial aid - some non-citizens with Social Security Numbers may also qualify. It is in the student's best interest to utilize federal grants first (if eligible), followed by federally subsidized loans (such as the Stafford Loan), then use unsubsidized loans if needed.

Evaluation completed by Tim Scoggins on 29 October 2016