Degree Program Course List (DPCL) of major requirements for Honors students entering Loyola in 2022-2023

NAME: **B.S. COMPUTER SCIENCE: GAME PROGRAMMING - CSGP/COSC.BS.GAME.H** (CIP 11.0701) **DATE:**

Honors Curriculum - 41 Credits

Foundation Requirements Crs/Grd

First-Year Seminar H121 3_____

Ignatian Colloquium H193 or H194 1_____

Social Justice Seminar H396 3_____

Honors Ethics H215 (check off once completed) ☐

Honors Disciplinary Requirements

Creative Arts & Culture (H-level or approved performance course(s))

_____ 3_____

History I H-level _____ 3_____

History II (H-level, HIST-A/Q/P200+ course, or AP credit)

_____ 3_____

Literature H-level _____ 3_____

Literature II (H-level, ENGL-N200+ course, or AP credit)

_____ 3_____

Mathematics A257 or H257 Calculus I 4_____

Natural Science (H-level, A101+ science course, or AP credit)

_____ 3_____

Philosophy I H-level _____ 3_____

Philosophy II (H-level or PHIL-U/W200+ course)

_____ 3_____

Religious Studies I H-level _____ 3_____

Religious Studies II (H-level or 200+ RELS course)

_____ 3_____

Honors Thesis Sequence

Research Projectc COSC A498 (3 crs. in the major) ☐

[1] May be satisfied with an ethics course in the major; if not, an honors ethics course must be used to satisfy at least one Honors Disciplinary Requirement

MAJOR.....42 Cr

Computer Science.....27 Crs

Intro to Programming I

Cosc A211_____3____

Intro to Programming II

Cosc A212_____3____

Object-Oriented Programming

Cosc A217_____3____

Intro to Computer Graphics

Cosc A280_____3____

Computer Organization

Cosc A315_____3____

Data Structures

Cosc A317_____3____

Languages and Paradigms

Cosc A361 _____3____

Operating Systems

Cosc A365 _____3____

Software Engineering

Cosc A451 _____3____

Game Programming Electives.....9 crs**

_____3____

_____3____

_____3____

Practical Experience.....6 Crs

Internship/COSC A497 _____3____

Capstone/COSC A426 _____3____

Honors GPA: Must achieve 3.3 in Major, Minor (if declared), and Loyola cumulative.

ADJUNCT.....6 Cr

Intro to Linear Algebra

MATH A200_____3____

Choose one from the following:

MATH A204, Discrete Math Structures

MATH A258, Calculus II (3 crs w/1 cr to GE)

MATH A260, Statistical Inference

MATH A271, Applied Scientific Computing

PHIL A206, Intro to Symbolic Logic

_____3____

GENERAL ELECTIVES.....31 Cr

_____3____

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Thesis work is a dedicated process that spans multiple semesters, and you may be asked to take additional scaffolding courses. Please consult an honors advisor about what steps are right for you.

*Game Programming Electives

Must choose three with at least one from each pool.

Artistic Pool

CMMN O202 or X237

DSGN M276 or M400

ENGLA222 or ENGLA444

ENGL A376 or ENGL N205

Digital Audio Production: MUGN M225, or

Any one Visual Arts: VISA A###

Technical Pool

Internet Technologies: COSC A319

Artificial Intelligence: COSC A405

Machine Learning: COSC A406

Computer Graphics: COSC A425

WWW & Scripts: COSC Y200

Computational Math: MATH A375

Classical Mechanics: PHYS A340

Physics of Sound: PHYS Y231

Honors Curriculum.....41 crs

Major.....42 crs

Adjuncts.....6 crs

General Elective.....31 crs

Total.....120 crs

Honors requirements are governed by the catalog year that a student is admitted.

Courses used in the major cannot also be used to satisfy requirements for a minor: Non-major courses WILL be applied to minors as appropriate.