GENERAL EDUCATION REQUIREMENTS - 48 CREDITS

Please refer to the approved list of Gen. Ed. courses that appears in the newspaper schedule.

I. LIBERAL EDUCATION SKILLS - 12 CREDITS
   A. English Composition (3 credits)
      Eng 111: Writing II
      CR: GR
   B. Mathematics Competency (3 credits)
      Mathematics, Eng 111: Writing II
   C. Credits to total 12 in Category I, selected from at least two of the following: Academic Enrichment, Communication, Computer Information Science, Elementary Foreign Language, English Composition, Logic, Mathematics, & Speech Communication
      PHIL 311: Logic II – Symbolic Logic

II. LIBERAL KNOWLEDGE - 27 CREDITS
   A. Physical and Biological Sciences (9 credits)
      selected from at least two of the following: Biology, Chemistry, Earth Sci., ENVR275, GS411, HON230, Mathematics, Phys. Sci. & Physics.
   B. Social & Behavioral Science (9 credits) selected from at least two of the following: Anthropology, Economics, Geography, GS140, History, HON240, NURS320, Pol. Sci. Psychology, Social Work, Sociology, & Women’s Studies
   C. Arts & Humanities (9 credits) selected from at least two of the following: Art, English Language and Literature, HON130, Humanities, Intermediate Foreign Language and Cultures, Music, Philosophy, Speech and Theater.

III. HEALTH AND PERSONAL PERFORMANCE - 3 CREDITS
   A. Health and Wellness (2 credits)
      B. Personal Performance (1 course and 1 credit)

IV. GEN. ED. ELECTIVES - CREDITS TO TOTAL 48 FROM GEN. ED. excluding credits in Computer Science major. Up to one credit of Personal Performance may be placed here.

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CREDITS TO TOTAL 48 FROM GEN. ED. excluding credits in Computer Science major. Up to one credit of Personal Performance may be placed here.

V. REQUIREMENTS IN MAJOR - 57 CREDITS

A. Required courses in Math/Computer Sci. (39 crs.)
   CR  GR
   CIS/MATH 140: Ess. Topics in Dis. Math for CS 3
   CIS 221: Econ-Bus Statistics I 3

   OR
   MATH 221: Elementary Applied Statistics 3
   CIS 202: Intro. to Program. & Algorithms I 3
   CIS 244: Intro. to Program. & Algorithms II 3
   CIS 253: Comp. Organiz. & Assembly Lang. 3
   CIS 254: Data Structures 3
   CIS 306: Object-Oriented Programming 3
   CIS 355: Operating Systems I 3
   CIS 356: Analysis of Algorithms 3
   CIS 375: Software Engineering 3
   CIS 411: Systems Development Project 3
   CIS 412: Parallel Processing 3
   CIS 460: Prog langs & Computation Theory 3

   B. Electives in Major (18 credits)
   CIS 270: Client Side Web Programming 3
   CIS 301: Computer Systems Analysis 3
   CIS 303: Local Area Networks 3
   CIS 305: Artificial Intelligence in Dec. Making 3
   CIS 312: Special Topics in Computing 3
   CIS 330: Information Systems Programming 3
   CIS 333: Info. Systems Auditing & Security 3
   CIS 370: Server Side Web Programming 3
   CIS 377: Computer Graphics 3
   CIS 402: Data Base Management Systems 3
   CIS 403: Data Communications 3
   CIS 406: Mobile Application Development 3
   CIS 422: Internship (1-6) 3
   CIS 462: Simulation and Modeling 3
   CIS/MGMT 470: Project Management 3

   • MATH 271: Calc. w/Analytic Geometry II 4
   MATH 272: Calc w/Analytic Geometry III 3
   MATH 300: An Intro to Advanced Mathematics 3
   MATH/CIS 340: Discrete Math. Structures 3
   MATH 360: Numerical Methods in Math I 3
   MATH 370: Linear Algebra 3
   MGMT 420: Operations Research 3

VI. FREE ELECTIVES

Credits to total 120 credits for graduation.

• Recommended choices for students planning to pursue graduate work in computer science.

NOTES:

1. PHIL 311 and either MATH 260 or MATH 270 may be placed in General Education. If used for General Education, check off under Major Requirements, but do not count the credits again under Major Requirements.

2. 1-6 credits of CIS 422 may be applied to Electives in Major.
University Policies Relating to Academic Requirements

- A student is obligated by those requirements, which are in effect at the time of his/her matriculation, but if he/she changes majors he/she is obligated by the requirements in effect at the time of the change. If a student has been out of school for more than two years and is readmitted, he/she is treated as a new student for requirement purposes.

- A minimum of 120 credits must be presented for graduation, of which at least 45 of the last 64 credits must have been earned in residence.

- No more than 2 credits of Personal Performance (III.B) may be counted for graduation. One is required under III.B.; a second credit of Personal Performance may be elected under IV. or Free Electives.

- Upon presentation of form DD 214, the university grants a maximum of 4 credits in Health and Physical Education for active military service of 4 months or more. Credit is normally given for HPE 111 (2 credits) and 2 HPE activity courses of 1 credit each.

- Maximum loads: students with a QPA of 3.0, 21 hours; students in good standing *, 18 hours; students on probation, 15 hours.

- To be in good academic standing, undergraduate students must maintain a minimum quality point average of 2.00 for both semester and cumulative averages.

- After a student has earned a minimum of 30 semester hours of credit and if he/she is in good academic standing he/she may schedule a maximum of six courses or 18 credit hours for Credit-No Record. One such course may be taken each semester. Courses in the student’s major may not be taken on a Credit-No Record basis.

- Course credits not to exceed 18 semester hours may be earned by departmental examination at Clarion. Application should be made in the Office of Academic Affairs.

- All candidates for an undergraduate degree must be in good academic standing (i.e., have a cumulative QPA of 2.00).

- Students may take a double major by satisfying the major requirements of two programs within a single degree. For example, one may take a B.A. with majors in English and Speech Communication. Ordinarily a double major (two majors within one degree) can be effected in 120 hours. Students who have earned their first baccalaureate degree from Clarion University may earn a second baccalaureate degree from a different college of the university or different degree (B.S., B.A., or B.F.A.) within the same college. This can be accomplished by completing all of the requirements of both degrees. In this case, the student will receive two diplomas. Students also may pursue two baccalaureate degrees concurrently by completing all of the requirements of both degrees. Students who have earned their first baccalaureate degree from another institution are responsible for satisfying Clarion University’s residence requirements.

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Fall 2014                            B.S. Computer Science