COMPUTER SCIENCE/COMPUTER INFORMATION SYSTEMS

Program Codes:

Computer Science: *T.CSC.AS.TEC*

Computer Information Systems: *T.CSC.AS.BUS*

Associate in Science (A.S.)
Graduation requirement — 60 semester hours

Baccalaureate degree programs in Information Technology have traditionally grown from a number of different disciplines, including Mathematics, Business, and Engineering. Computer Science (CS) degrees usually have a general theoretical emphasis. Computer Information Systems (CIS) degrees have more of a business emphasis. Computer Engineering degrees have a hardware emphasis. At the two year level, either the CS or CIS degree provides a good foundation for further study in most fields of Computer Science. Engineering degrees are most specific to future engineering study. To transfer into a baccalaureate degree program in Computer Science as a junior, students need to complete a minimum of 60 semester credits. Students are strongly encouraged to complete an A.S. degree prior to transfer. Since admission is competitive, completion of the recommended courses does not guarantee admission.

Students should plan their transfer programs with a faculty advisor and the catalog of the four-year college or university they plan to attend.

Program Notes*

- Prerequisites for MAT 128 are MAT 124 and MAT 125.
- PHY 141 is required for students planning to transfer to UIUC and others.
- IAI CS 922, Computer Organization, is not offered at Parkland. Check with your transfer institution to see if it is required in their program.
- Computer Information Systems transfers to UIUC School of Business, Management Information Systems.
- General Education Core Curriculum requirements for the Associate in Science (A.S.) degree do not fully satisfy the IAI General Education Core Curriculum (GECC) requirements. Additional courses to complete the GECC may be taken at Parkland or after transferring. Contact Counseling Services for guidance on completing the GECC.
- Recommended courses are designed to facilitate completion of the A.S. degree and transfer into a four-year college or university with junior standing. Students are strongly advised to follow the recommendations.

Suggested Full-time Sequence

COMPUTER SCIENCE

FALL *1st Semester*	*SPRING* *2nd Semester*
CSC 123	CSC 125
MAT 128	MAT 129
ENG 101 *or* ENG 106	ENG 102 *or* ENG 220
Hum elec	PHY 141
Soc/Beh Sci elec	

FALL *3rd Semester*	*SPRING* *4th Semester*
COM 103	CSC 220
MAT 228	MAT 200
PHY 142	Fine Arts elec
Life Sci elec	Soc/Beh Sci elec

COMPUTER INFORMATION SYSTEMS

FALL *1st Semester*	*SPRING* *2nd Semester*
CIS 200	CSC 140
MAT 128 *or* MAT 145	ACC 101
ENG 101 *or* ENG 106	ECO 101
CIS 122	MAT 129 *or* MAT 143
Phys Sci elec	Hum elec

FALL *3rd Semester*	*SPRING* *4th Semester*
CSC 256	MAT 141
ACC 102	ECO 102
ENG 102 *or* ENG 220	COM 103
Fine Arts elec	PSY 101
Life Sci elec	Phys/LS elec

COMPUTER SCIENCE/COMPUTER INFORMATION SYSTEMS (CONT'D)

COMPUTER SCIENCE CONCENTRATION (TECHNICAL EMPHASIS)

Program Code: T.CSC.AS.TEC

General Education Core Courses* (32–34 hours) **Cr. Hrs.**

Communications (9)
- ENG 101 Composition I 3
- ENG 102 Composition II 3
- COM 103 Introduction to Public Speaking 3

Humanities/Fine Arts electives 6
- *Must choose one course from Humanities and one from Fine Arts*

Social/Behavioral Sciences electives 6
- *The Soc/Beh Sci courses must be from two different disciplines*
- *One course from Hum/Fine Arts or Soc/Beh Sci must fulfil the non-Western culture requirement*

Mathematics elective 3–5
Recommended: MAT 128* Calculus and Analytic Geometry I (5)

Life Sciences (laboratory-based) elective 4

Physical Sciences (laboratory-based) elective 4
Recommended: PHY 141* Mechanics (4)

A.S. Degree Required Courses (8 hours)

Must include one additional mathematics and one additional physical or life science course.

Any AST, BIO, CHE, ESC, PHY, or SCI courses numbered 100 through 289 whose second digit is even, beyond the general education requirements in science, may fulfill the additional science course requirement.

Recommended:

MAT 129 Calculus and Analytic Geometry II 4

PHY 142 Electricity and Magnetism 4

Recommended* Computer Science Concentration Courses (17 hours)

CSC 123 Computer Science I (C/C++) 4
CSC 125 Computer Science II (C++) 3
CSC 220 Data Structures 3
MAT 200 Introduction to Discrete Mathematics 3
MAT 228 Calculus and Analytic Geometry III 4

Electives (1–3 hours)

Select courses to meet the minimum 60-hour graduation requirement.

Elective 1–3

Total Semester Credit Hours *60*

COMPUTER INFORMATION SYSTEMS CONCENTRATION

Program Code: T.CSC.AS.BUS

General Education Core Courses (32–34 hours) **Cr. Hrs.**

Communications (9)
- ENG 101 Composition I 3
- ENG 102 Composition II 3
- COM 103 Introduction to Public Speaking 3

Humanities/Fine Arts electives 6
- *Must choose one course from Humanities and one from Fine Arts*

Social/Behavioral Sciences electives 6
Recommended: ECO 101 Principles of Macroeconomics (4)
- *The Soc/Beh Sci courses must be from two different disciplines*
- *One course from Hum/Fine Arts or Soc/Beh Sci must fulfil the non-Western culture requirement*

Mathematics elective 3–5
Recommended: MAT 128* Calculus and Analytic Geometry I (5) or MAT 145 Linear Algebra for Business (4)

Life Sciences (laboratory-based) elective 4

Physical Sciences (laboratory-based) elective 4

A.S. Degree Required Courses (8 hours)

Must include one additional mathematics and one additional physical or life science course.

Any AST, BIO, CHE, ESC, PHY, or SCI courses numbered 100 through 289 whose second digit is even, beyond the general education requirements in science, may fulfill the additional science course requirement.

Recommended:

MAT 129 Calculus and Analytic Geometry II (4)
Or MAT 143 Calculus for Business and Social Sciences (4)

Recommended* Computer Information Systems Concentration Courses (17 hours)

CSC 140 Computer Science I (Java) 3
CSC 256 Computer Science II (Java) 3
CIS 200 Business Computer Systems 3
ACC 101 Financial Accounting 4
MAT 141 Finite Mathematics 4

Electives (1–3 hours)

Select courses to meet the minimum 60-hour graduation requirement.

Elective 1–3

Total Semester Credit Hours *60*