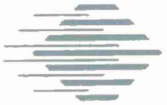
Technical Report

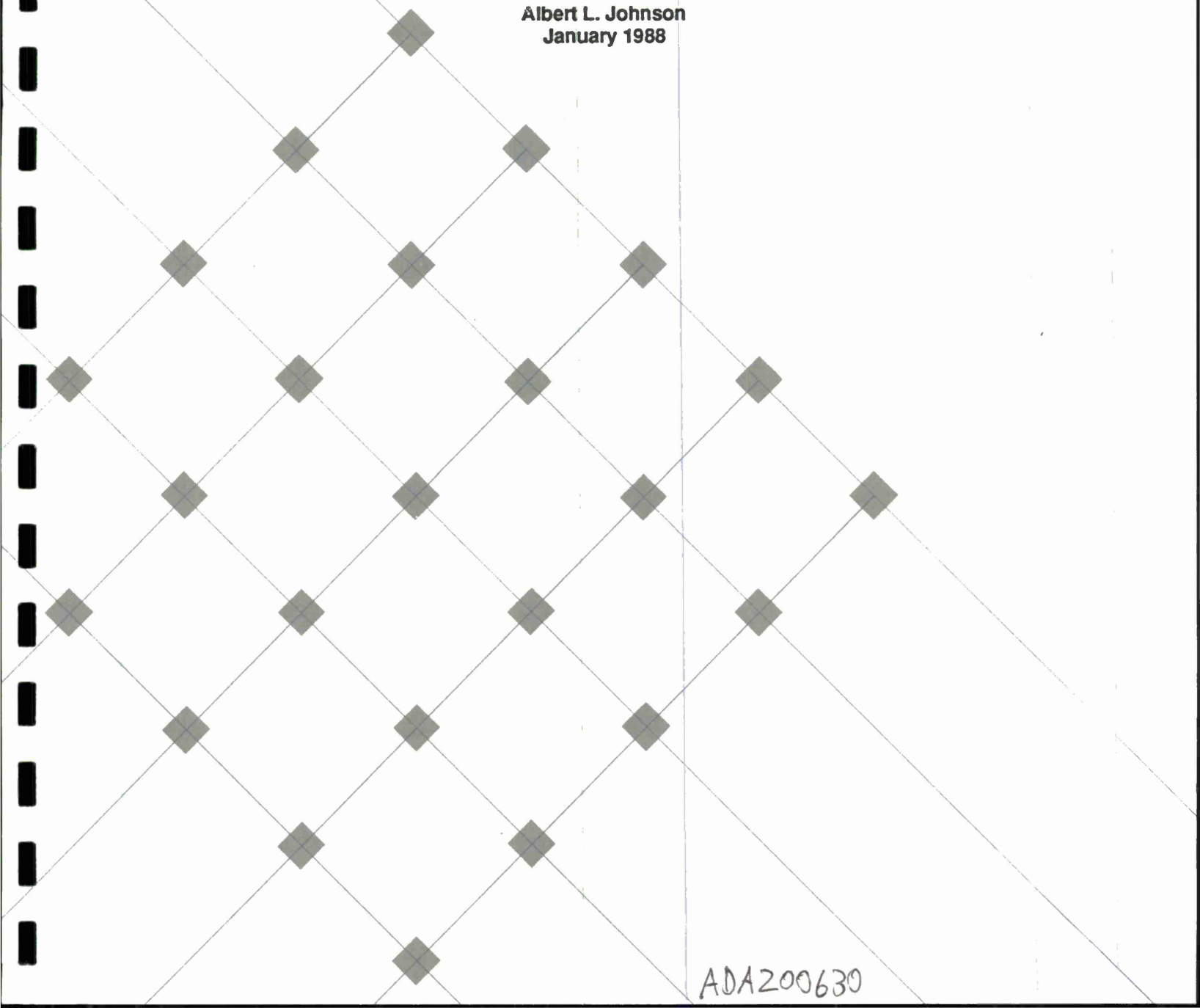
CMU/SEI-88-TR-2
ESD-TR-88-003



Carnegie-Mellon University
Software Engineering Institute

Software Engineering Education Directory

Albert L. Johnson
January 1988



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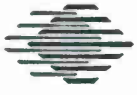
Technical Report

CMU/SEI-88-TR-2

ESD-TR-88-003

January 1988

Software Engineering Education Directory



Albert L. Johnson

Software Engineering Education

Approved for public release.
Distribution unlimited.

Software Engineering Institute
Carnegie Mellon University
Pittsburgh, Pennsylvania 15213

This technical report was prepared for the

SEI Joint Program Office
ESD/XRS
Hanscom AFB, MA 01731

The ideas and findings in this report should not be construed as an official DoD position. It is published in the interest of scientific and technical information exchange.

Review and Approval

This report has been reviewed and is approved for publication.

FOR THE COMMANDER

Daniel Burton
SEI Joint Program Office

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SEI Software Engineering Education Directory

Foreword

The purpose of this directory is twofold. First, it should help people make rational choices among software engineering courses and software engineering degree programs by presenting a detailed listing of offerings. It should also help maintain contact between the SEI and people at the institutions offering these courses and programs.

Dana Hausman and Suzanne Woolf were crucial to the successful completion of this edition of the directory. Their teamwork, energy, and dedication made it what it now is. Mark Ardis and Gary Ford helped edit the entries, which improved the directory's quality and value. Susan Dunkle and the Information Management staff of the SEI were helpful in developing its attractive layout. We extend our thanks to them and all others who aided this effort.

Albert Johnson
Technical Program Administrator

Software Engineering Institute
Software Engineering Education Directory

Abstract: This directory provides information about software engineering courses and software engineering degree programs that are available in the United States and Canada.

Introduction

The Software Engineering Institute (SEI) is a federally funded research and development center, sponsored by the Department of Defense and operated by Carnegie Mellon University. The mission of the SEI is to serve the public interest by establishing the standard of excellence for the art and practice of software engineering and by accelerating the transition of software technology.

This directory has been compiled to provide information that will help students and their advisors make appropriate educational choices. It contains a detailed listing of available software engineering courses and software engineering degree programs.

In future editions of this directory, we plan to provide indices and cross tabulations showing a profile of ongoing software engineering education efforts. Please contact Albert Johnson, Software Engineering Institute, Carnegie Mellon University, Pittsburgh, PA 15213 to discuss any issues related to this report.

Directory Guide

Compilation of Entries

Compilation of entries for this directory began in the summer of 1986 with a questionnaire mailed to schools selected from Peterson's *Graduate Programs in Engineering and Applied Sciences 1986.* We contacted schools offering graduate degrees in computer engineering, computer science, information science, software engineering, and systems engineering because they seemed most likely to offer courses involving software engineering concepts.

Of the 456 original questionnaires mailed, more than 33% were returned. A random telephone survey of people who did not return questionnaires for their universities revealed that none offered courses related to software engineering. We also included information from other reliable sources. Thus we feel that the directory is reasonably complete, although not exhaustive.

This year, we updated course entries by contacting all who gave us information last year. We sent each a revised questionnaire, including guidelines for responses. Most people responded to our update request.

We have edited the directory entries for accuracy, completeness, and relevance to software engineering. We are limited in our ability to edit responses, though, and might have included courses in the listings that do not seem to be closely related to software engineering study. However, all such courses were cited as part of a software engineering sequence in the responses that we received. In addition, please be aware that some "Textbook" entries actually contain articles, reports, or other published papers. In such cases, the papers shown are consistently used and considered to be required course reading.

Some of the entries in this edition of the directory have never been updated. We plan to drop them from the next edition.

Changes in the Directory

Changes we adopted this year include:

- **Annual update-and-release cycle.** We are committed to update the directory continuously and to publish a new edition each year.
- **More stringent standards for courses to be included in the directory.** Courses in data structures, computer science fundamentals, programming, database management, hardware, simulation, and similar topics are included only if they are directly related (say, as co-requisites) to a sequence of software engineering courses.
- **More information.** We added fields to the course entries. One is an **Update** field showing the month and year of the last update to that course entry. We also expanded the **Systems** subfield to three: **Compilers, Computers**, and **Languages.** This shows the software and hardware environment associated with each course more clearly than we had previously.

How to use this Directory

The directory entries are in alphabetical order by institution name. Each entry lists the following:

- **Degrees.** These are the degree programs which have software engineering courses as electives or requirements.
- **Contact.** This is the person you may contact for more information about the software engineering courses offered at the institution.
- **Update.** The month and year that a directory entry was last maintained appear here.
- **Courses.** Software engineering and related (co-requisite, laboratory, or advanced elective) courses are listed under this title. Each **Course** has four self-explanatory subtitles, **Textbooks, Compilers, Computers,** and **Languages.**

Notation in abbreviations

Each degree entry has one or two parts. The first part is the degree and the second part, if present, is the subject. For example, BSC, BS EE, MSE, MA CE means Bachelor of Computer Science, Bachelor of Science in Electrical Engineering, Master of Software Engineering, and Master of Arts in Computer Engineering. The abbreviations used appear on the following page.

Degrees

AAS	Associate of Applied Science
AS	Associate of Science
B	Bachelor Degree
BA	Bachelor of Arts
BBA	Bachelor of Business Administration
BC	Bachelor of Commerce
BCS	Bachelor of Computer Science
BE	Bachelor of Engineering
BED	Bachelor of Education
BEECS	Bachelor of Elec. Eng. and Comp. Sci.
BM	Bachelor of Mathematics
BS	Bachelor of Science
BSE	Bachelor in Science and Engineering
BSSE	Bachelor of Systems Science and Eng.
BO	Bachelor Degree (Other)
M	Master Degree
MA	Master of Arts
MCS	Master of Computer Science
ME	Master of Engineering
MED	Master of Education
MEM	Master of Engineering Management
MM	Master of Mathematics
MS	Master of Science
MSAT	Master of Applied Science and Tech.
MSDD	Master of Software Design and Dev.
MSE	Master of Software Engineering
MSSM	Master of Systems Science and Math.
MO	Master Degree (Other)
DENG	Doctor of Engineering
PHD	Doctor of Philosophy
PHDAT	Doctor of Applied Science and Tech.
SCD	Doctor of Science
O	Other

Subjects

AI	Artificial Intelligence
AT	Advanced Technology
BA	Business Administration
CAD	Computer Aided Design Tech.
CE	Computer Engineering
CET	Computer Electronics Tech.
CIS	Computer and Information Sci.
	Computer Information Systems
CM	Computer Management
CP	Computer Programming
CS	Computer Science
	Computing Science
CSE	Computer Science Engineering
	Computer and Systems Eng.
	Computer Systems Engineering
CSED	Computer Science Education
CT	Computer Technologies
E	Engineering
EE	Electrical Engineering
IE	Industrial Engineering
	Information Engineering
IS	Information Science
	Information Systems
ISE	Industrial and Systems Eng.
M	Mathematics
	Mathematical Sciences
MIS	Management Information Sys.
SE	Software Engineering
SSM	Systems Science and Eng.
SYSE	Systems Engineering
SYSS	Systems Science
TCS	Teaching of Computer Science
O	Other

A complete **Courses** entry has six fields on the first line, arranged in order of course name, course number, level, prerequisite, status, and frequency. The codes as used in the corresponding fields are:

Level:

U	Undergraduate
G	Graduate
B	Both
O	Other
X	No information supplied

Prerequisite:

P	The course has at least one prerequisite
N	None
X	No information supplied

Status:

R	Required
E	Elective
B	Both
O	Other
X	No information supplied

Frequency:

B	Biennial
Y	Once a year
T	Once a term
A	Alternate terms
D	On demand
O	Other
X	No information supplied

Most **Courses** entries also have fields describing the textbooks, compilers, computers, and languages used. Here are examples:

Introduction to Software Engineering with Ada MATH 555 G N R T 5
Textbooks: *Ada Primer*
by SofTech, Inc.
Reference Manual for the Ada Programming Language
ANSI/MIL-STD-1815A
Software Components with Ada: Structures, Tools, and Subsystems
by Booch, Grady
Software Engineering with Ada
by Booch, Grady
Compilers: Verdix Ada
Computers: Vax 11/785 Unix
Languages: Ada

Software Project Management and Development I CSC 460 U P E T 8
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
Compilers: Pascal
Computers: Vax (VMS or Unix)
Languages: Pascal

Software Engineering Institute
Software Engineering Education Directory

Acadia University Jodrey School of Computer Science
Department of Computer Science
Wolfville, NS, B0P 1X0, Canada

Degrees: BCS, MS

Contact: Dr. Oliver, Leslie H.
Director
(902) 542-2201 x331

Update: September 1987

Courses: **Software Engineering** Comp 3653 U P B Y 3
Textbooks: *Applying Software Engineering Principles* by Maria
Compilers: MASM
Turbo Pascal
Computers: PC-Compatible
Vax
Languages: C
Pascal

Air Force Institute of Technology School of Engineering
Department of Computer Engineering
Wright-Patterson AFB, OH, 45433-6583, United States

Degrees: MS, MS EE, PHD

Contact: Dr. Howatt, James W.
Assistant Professor of Computer Systems
(513) 255-6913

Update: June 1987

Courses: **Software Project Management** EENG543 G N R A 1
Textbooks: *Principles of Productive Software Management* by Evans, Piazza, and Dolkas
Computers: Vax 11/785 Unix

Software Engineering EENG593 G P R T 7
Textbooks: *Software Engineering: A Practitioner's Approach* by Pressman, Roger S.
Computers: Vax 11/785 Unix

Software Systems Programming Laboratory EENG690 G P R A 5
Compilers: C
Computers: LAN connecting PDP 11/70 processors
Languages: C

Advanced Software Engineering Laboratory EENG696 G P E Y 1
Compilers: C
Languages: C

Advanced Software Engineering EENG793 G P E Y 5

Introduction to Software Engineering with Ada MATH 555 G N R T 5
Textbooks: *Ada Primer*
by SofTech, Inc.
Reference Manual for the Ada Programming Language
ANSI/MIL-STD-1815A
Software Components with Ada: Structures, Tools, and Subsystems
by Booch, Grady
Software Engineering with Ada
by Booch, Grady
Compilers: Verdix Ada

Computers: Vax 11/785 Unix
Languages: Ada

Advanced Software Environments MATH755 G P E Y 3
Textbooks: *Programming with APSE Software Tools*
by Freedman
Research Directions in Software Technology
by Wegner, Peter
Computers: Vax 11/785 Unix

Arizona State University College of Engineering and Applied Science
Department of Computer Science
Tempe, AZ, 85287, United States

Degrees: BS, MS, PHD

Contact: Dr. Collofello, James S.
Associate Professor of Computer Science
(602) 965-3190

Update: November 1987

Courses: **Software Project Management and Development I** CSC 460 U P E T 8
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
Compilers: Pascal
Computers: Vax (VMS or Unix)
Languages: Pascal

Software Project Management and Development II CSC 560 G P E T 5
Compilers: Pascal
Computers: Vax (VMS or Unix)
Languages: Pascal

Software Requirements CSC 563 G P E Y 5
Compilers: Pascal
Computers: Vax (VMS or Unix)
Languages: Pascal

Software Design CSC 564 G P E Y 5
Compilers: Pascal
Computers: Vax (VMS or Unix)
Languages: Pascal

Software Testing CSC 565 G P E Y 5
Compilers: Pascal
Computers: Vax (VMS or Unix)
Languages: Pascal

Software Maintenance CSC 566 G P E Y 5
Compilers: Pascal
Computers: Vax (VMS or Unix)
Languages: Pascal

Special Topics in Software Engineering CSC 590 G P E D 5
Compilers: Pascal
Computers: Vax (VMS or Unix)
Languages: Pascal

Auburn University School of Engineering
Department of Computer Science and Engineering
Auburn University, AL, 36849, United States

Degrees: BS, MS, PHD

Contact: Dr. Cross, James H.
Head
(205) 826-4330

Update: May 1987

Courses: **Introduction to Software Engineering** CSE 305 U N R T 3
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
Computers: IBM PC
TI Pro
Languages: Excelerator (InTech)

Software Engineering I CSE 522 B P E Y 3
Textbooks: *Software Reliability: Principles and Practices*
by Myers, Glenford J.
Compilers: Vax
Computers: Vax
Languages: Pascal

Software Engineering II CSE 622 G P E Y 3
Textbooks: *Input Output Requirements Language (IORL) Reference Manual*
by Teledyne Brown Engineering
Compilers: IORL
Computers: Apollo
Languages: IORL

Ball State University College of Sciences and Humanities
Department of Computer Science
Program in Computer Science
Muncie, IN, 47306, United States

Degrees: BS, MA, MS

Contact: Prof. Brown, W. F.
Professor
(317) 285-8644

Update: May 1987

Courses: **Software Engineering I (Systems Analysis)** 497 U P R O 10

Textbooks: *Standards Manual for Software Engineering I*
by Brown, W.F. (editor)
Structured Analysis and System Specification
by DeMarco, Tom
Systems Analysis - Definition, Process, and Design
by Semprevivo, Philip

Compilers: C
COBOL
Fortran
Pascal

Computers: Dept Vax 785 (Unix)
Vax cluster (three 785, one 86500)

Languages: C
COBOL
Fortran
Pascal

Software Engineering II (Design and Development) 498 U P R O 4

Textbooks: *Standards Manual for Software Engineering II*
by Brown, W.F. (editor)
Structured Analysis and System Specification
by DeMarco, Tom
Structured Design
by Yourdon, Edward and Constantine, Larry L.

Compilers: C
COBOL
Fortran
Pascal

Computers: Dept Vax 785 (Unix)
Vax cluster (three 785, one 86500)

Languages: C
COBOL
Fortran
Pascal

Principles of Software Engineering 580 G N R Y 3

Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.

Compilers: Ada
C

Computers: Dept Vax 785 (Unix)
Vax cluster

Languages: Ada
C

Boston University School of Engineering
Department of Electrical, Computer, and Systems Engineering
Programs in Systems Engineering, Computer Engineering, Electrical Engineering
Boston, MA, 02215, United States

Degrees: MS SYSE

Contact: Prof. Vidale, Richard F.
Professor
(617) 353-2808

Update: December 1987

Courses: **Software Systems Design** SC 511 G N R Y 3

Compilers: Digital Corp. and Vax Ada
Computers: Vax 785
Encore
Languages: Ada

Applications of Formal Methods SC 517 G N R Y 1
Compilers: Digital Corp. and Vax Ada
Computers: Vax 785
Encore
Languages: Ada

Software Project Management SC 518 G P R Y 1
Compilers: Digital Corp. and Vax Ada
Computers: Vax 785
Encore
Languages: Ada

The Computer as a System Component SC 714 G P R Y 3
Compilers: Digital Corp. and Vax Ada
Computers: Vax 785
Encore
Languages: Ada

Software Engineering Project SC 912 G P R Y 3
Compilers: Digital Corp. and Vax Ada
Computers: Vax 785
Encore

Languages: Ada

Bowling Green State University School of Arts and Sciences
Department of Computer Science
Bowling Green, OH, 43402, United States

Degrees: BS CS, MS CS

Contact: Dr. Mynatt, Barbee
Associate Professor
(419) 372-2339

Update: November 1987

Courses: **Software Development** 464 U P E Y 7
Textbooks: *Software Engineering: A Practitioner's Approach* by Pressman, Roger S.
Computers: IBM PC
Macintosh
Languages: Pascal

Software Engineering 564 G P E Y 4
Languages: SAS (Statistical Analysis System)

Bradley University College of Liberal Arts and Sciences
Department of Computer Science
Program in Comp. Sci., Comp. Info. Sys. (undergraduate), Comp. Sci. (graduate)
Peoria, IL, 61625, United States

Degrees: BS, MS

Contact: Prof. Fendrich, John
Chairman
(309) 677-2460

Update: July 1987

Courses: **Computers and Programming with Pascal I** CS 106 U N R O 7
Textbooks: *Building Pascal Programs*
by Reges, Stuart
Compilers: Minnesota Pascal
Computers: Cyber 830
Languages: Pascal

Systems Analysis and Design (System Specification and Development) CS 403 U P E O 7
Textbooks: *Structured Analysis and System Specification*
by DeMarco, Tom
Computers: Personal computers
Languages: Text processing system
Word processing system

Systems Analysis and Design (System Specification and Development) CS 608 G P E O 7
Textbooks: *Structured Analysis and System Specification*
by DeMarco, Tom
Computers: Personal computers
Languages: Text processing system
Word processing system

Programming Methodology CS 503 B P E O 5
Textbooks: *Discipline of Programming*
by Dijkstra, Edsger Wybe
The Science of Programming
by Gries, David

Introduction to Software Engineering CS 406 U P E Y 1

Structured Programming using C CS 221 U P E O 4
Textbooks: *Efficient C*
by Plum, Thomas and Brodie, Jim
Learning to Program in C
by Plum, Thomas
Reliable Data Structures in C
by Plum, Thomas
Compilers: C
Computers: AT&T 3B series
Vax
Languages: C

Software Engineering I CS 615 G P E Y 4
Textbooks: *Software Engineering Metrics and Models*
by Conte, Samuel Daniel, Dunsmore, H.E., and Shen, V.Y.
Compilers: SPSS
Computers: Cyber
Languages: SPSS

Software Engineering II CS 616 G P E Y 4
Textbooks: *Handbook of Walkthroughs, Inspections, and Technical Reviews*
by Freedman, Daniel P. and Weinberg, Gerald M.
Software Testing Techniques
by Beizer, Boris

Brigham Young University College of Math and Applied Sciences
Department of Computer Science
Provo, UT, 84602, United States

Degrees: BS CS, MS CS, PHD CS

Contact: Prof. Woodfield, Scott N.
Associate Professor
(801) 378-2915

Update: November 1987

Courses: **Introduction to Software Design** CS 327 U P R O 9
Textbooks: *Composite Structure Design*
by Myers, Glenford J.
Software Engineering
by Sommerville, Ian
Computers: Unix (Vax, Sun Microsystems, 3B2)
Languages: Ada
Eiffel

Software Testing CS 429 U P E O 9
Textbooks: *Software Testing Techniques*
by Beizer, Boris

Systems Analysis CS 425 U P E O 9
Textbooks: *Structured Analysis and System Specification*
by DeMarco, Tom
Structured Systems Analysis: Tools and Techniques
by Gane, Chris and Sarson, Trish

Software Development and Maintenance CS 525 G P E O 3
Textbooks: *IEEE Tutorial on Software Design Techniques*
by Freeman, Peter and Wasserman, Anthony I.

Software Management and Quality Assurance CS 527 G P E O 3
Textbooks: *IEEE Tutorial: Software Configuration Management*
by Bryan, William, Chadbourne, Christoper, and Siegel, Stan
Software Cost Estimation and Life-Cycle Control
by Putnam, Lawrence H.
Software Quality Assurance: A Practical Approach
by Chow, Tsun S.

Theory of Software Engineering CS 627 G P E O 3

California Polytechnic State University School of Engineering
Department of Computer Science
San Luis Obispo, CA, 93407, United States

Degrees: BS CS, MS CS

Contact: Prof. Beug, Jim
Professor
(805) 546-2824

Update: May 1987

Courses: **Software Engineering I** CSC 440 U P R O 8
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.

Software Engineering II CSC 441 U P R O
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
Computers: Mac II
Xerox 8010
Languages: Mesa
Modula-2

Software Tools CSC 340 U P E O 4
Computers: Pyramid Unix
Languages: C
Mesa

California State Polytechnic University School of Science
Department of Computer Science
Pomona, CA, 91768-4034, United States

Degrees: BCS, MCS

Contact: Dr. Hillam, Bruce P.
Chairman
(714) 869-3440

Update: October 1987

Courses: **Advanced Programming** CS 340 U P R T 1
Textbooks: *Software Development in Pascal*
by Sahni, Sartaj
Compilers: Pascal
Computers: IBM XT
Languages: Pascal

Software Engineering CS 360 U P E O 1
Textbooks: *Software Engineering with Ada*
by Booch, Grady
Compilers: Irvine Compiler Corporation, Ada
Computers: Integrated Solution workstation
Languages: Ada

California State University, Chico College of Engineering, Computer Science and Technology
Department of Computer Science
Chico, CA, 95929, United States

Degrees: BS, MS

Contact: Dr. Madrigal, Orlando S.
Professor and Chairman
(916) 895-6442

Update: November 1987

Courses: **Software Engineering** CSCI 210 U P E T 2
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
The Mythical Man-Month: Essays on Software Engineering
by Brooks, Frederick Phillips

Systems Design CSCI 270 U P R T 10
Textbooks: *Systems Analysis and Design: Traditional and Advanced Concepts and Techniques*
by Wetherbe, James C.

System Design Theory CSCI 370 G P E Y 10
Textbooks: *Controlling Software Projects: Management Measurement and Estimation*
by DeMarco, Tom
IEEE Tutorial: Software Management
by Reifer, Donald

Advanced Software Practices CSCI 251 U N E T 10
Textbooks: *Programming in Ada*
by Barnes, John Gilbert Presslie
Compilers: Ada
Computers: IBM AT
Prime 9600
Languages: Ada

Software Metrics and Control CSCI 310 G P E O 2

Software Design CSCI 311 G P E O 2
Textbooks: *A Technique for Software Module Specification with Examples*
by Parnas, D.L.
Chief Programmer Team Management of Production Programming
by Baker, F.T.
Concise Notes on Software Engineering
by DeMarco, Tom
Data Design in Structured Systems Analysis
by Gane, C.P.
Fundamentals of Design
by Freeman, Peter
Go To Statement Considered Harmful
by Dijkstr, E.
Programming Considered as a Human Activity
by Dijka, E.
The Humble Programmer
by Dijka, E.
The Mythical Man-Month: Essays on Software Engineering
by Brooks, Frederick Phillips

Software Analysis and Testing CSCI 312 G P E O 10

California State University, Northridge School of Engineering and Computer Science
Department of Computer Science
Northridge, CA, 91330, United States

Degrees: BS, MS

Contact: Dr. Modesitt, Ken
Professor
(818) 885-3398

Update: May 1987

Courses: **Program Design Techniques** CS 380 U P R T 8
Textbooks: *Software Design and Development*
by Gilbert, Philip
Structured Analysis and System Specification
by DeMarco, Tom
Compilers: Pascal (Turbo, PR1ME)

Computers: AT&T 3B5
CDC Cyber 170/750
DEC PDP 11/44
IBM XT
Prime
Languages: Pascal

Software System Development and Laboratory CS 480 U P E T 10
Textbooks: *Software Design and Development*
by Gilbert, Philip

Compilers: Pascal (Turbo)
Computers: AT&T 3B5
CDC Cyber 170/750
DEC PDP 11/44
IBM XT
Prime
Languages: Pascal

Software Engineering CS 580 G N R Y
Textbooks: *Software Engineering: Design, Reliability, and Management*
by Shooman, Martin L.

Compilers: Pascal
Computers: AT&T 3B5
CDC Cyber 170/750
DEC PDP 11/44
IBM XT
Prime
Languages: Analyst Toolkit (Yourdon)
Design Aid (Nastec)
Excelerator (Intech)
Pro Mod

Software Engineering Economics CS 494 SEE B P E Y 3
Textbooks: *Software Engineering Economics*
by Boehm, Barry W.

Software Engineering with Ada CS 496 ADA B P E Y 2
Textbooks: *Software Engineering with Ada*
by Booch, Grady
Compilers: Meridian
NYU-Ada/Ed-C
Vax Ada
Verdix Ada
Languages: Ada

California State University, Sacramento School of Engineering and Computer Science
Department of Computer Science
Concentration in Software Engineering
Sacramento, CA, 95819, United States

Degrees: BS CS, MS CS

Contact: Dr. Thayer, Richard H.
Professor in Computer Science
(916) 278-6834

Update: September 1987

Courses: **Computer Software Engineering** CSC 131 U P R T 4
Textbooks: *Software Engineering with System Analysis and Design*
by Steward, Donald V.
Computers: IBM PCs
Languages: CASE tools
Computer System Analysis CSC 170 U P E T 12
Textbooks: *Introduction to System Analysis and Design: A Structured Design*
by Kendall, Penny A.
Computers: IBM PCs
Languages: CASE tools

Software Engineering Project Management CSC 171 U P E O 10
Textbooks: *Practical Project Management*
by Page-Jones, Meilir
The Mythical Man-Month: Essays on Software Engineering
by Brooks, Frederick Phillips

Documentation Design CSC 178 U N E T 3
Textbooks: *Writing Handbook for Computer Professionals*
by Skees, William D.
Computers: IBM PCs
Languages: Word processors

Senior Project: Part I CSC 190 U P R T 16
Textbooks: *Guide for Senior Project Documents*
by Thayer, Richard H.

Senior Project: Part II CSC 191 U P R T 6
Textbooks: *Guide for Senior Project Documents*
by Thayer, Richard H.

Software Testing and Quality Assurance, Fall 1986 CSC 196D U P E Y 1
Textbooks: *Software Testing and Quality Assurance*
by Beizer, Boris

Foundation of Software Engineering CSC 203 G N O Y 4
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.

Software Requirement Analysis and Design CSC 210 G P E O 10
Textbooks: *An Integrated Approach to Software Development*
by Abbott, J.R.
Computers: IBM PCs
Languages: CASE tools

Software Engineering Economics CSC 231 G P E O 14
Textbooks: *Software Engineering Economics*
by Boehm, Barry W.
Computers: IBM PCs
Languages: WICOMO or other PC based, cost analysis tool

Advanced Computer System Analysis CSC 240 G P E O 10
Textbooks: *Structured Development for Real-Time Systems*
by Ward, P.T. and Mellor, S.J.
System Analysis and Management: Structure, Strategy and Design
by Steward, Donald V.

Introduction to System Engineering Engr 130 U P E Y 2
Textbooks: *Systems Engineering: Methodology and Applications*
by Sage, Andrew P. (ed.)

Carleton University Faculty of Engineering
Department of Systems and Computer Engineering
Programs in Computer Systems Engineering and Electrical Engineering
Ottawa, ON, K1S 5B6, Canada

Degrees: BE, ME, MCS, MS, PHD

Contact: Prof. Bowen, B. A.
Chairman
(613) 564-2793

Update: None

Courses: **Software Engineering** 94.480 U N X Y
Textbooks: *Software Tools in Pascal*
by Kernighan, Brian and Plauger, P.J.
System Design with Ada
by Buhr, R.J.A.

Digital Systems Engineering 94.533 G N X T

System Design with Ada 94.531 G N X T

Carnegie Mellon University
Department of Computer Science
Pittsburgh, PA, 15213, United States

Degrees: PHD CS

Contact: Dr. Habermann, A. Nico
Professor and Department Head
(412) 268-2592

Update: December 1987

Courses: **Software Engineering** 15-413 U P E Y 15
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
Compilers: Ada
C
Lisp
Computers: Tops 20
Unix on Vax
Languages: Ada
C
Lisp

Central Connecticut State University School of Arts and Science
Department of Mathematics and Computer Science
Program in Computer Science
New Britain, CT, 06050, United States

Degrees: BS

Contact: Prof. Miller, George B.
Chairman, Mathematics and Computer Science
(203) 827-7374

Update: November 1987

Courses: **Introduction to Software Engineering** CS 410 U P E Y 4
Textbooks: *Software Engineering with MODULA-2 and Ada*
by Wiener, Richard S., and Sincovec, Richard F.
Computers: Vax 8600
Languages: Pascal

Programming Languages CS 464 U P E Y 1
Computers: Vax 8600
Languages: Pascal

Software Engineering II CS 514 G P R Y 1
Languages: Pascal

Computer System Software and Architecture I CS 516 G P R Y 1
Languages: Pascal

Computer System Software and Architecture II CS 517 G P R Y 1
Languages: Pascal

On Line, Real Time, and Time Sharing Systems CS 257 G P E Y 1
Languages: Pascal

Clarkson University School of Science
Department of Mathematics and Computer Science
Potsdam, NY, 13676, United States

Degrees: BS, MS, PHD

Contact: Dr. Fokas, A. S.
Chairman
(315) 268-2395

Update: November 1987

Courses: **Systems Programming** MA 443 U P E Y 10
Textbooks: *Systems Programming*
by Donovan, John J.
Computers: DEC Pro
Gould
IBM mainframe
Z-100 MS DOS
Zenith 200

Software Design and Development MA 450 U N E Y 5
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
Computers: DEC Pro
Gould
IBM mainframe
Z-100 MS DOS
Zenith 200

Software Tools MA 250 U P R Y 1

Compilers: Turbo C
Computers: DEC Pro
Gould
IBM mainframe
Z-100
Zenith 200
Languages: C
Pascal

Clemson University College of Sciences
Department of Computer Science
Clemson, SC, 29634-1906, United States

Degrees: BS, BS CIS, MS, PHD CS

Contact: Dr. Turner, A. J.
Head
(803) 656-3444

Update: October 1987

Courses: **Software Development Methodology** CpSc 472/672 B P B O 5
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
Software Engineering Concepts
by Fairley, Richard E.
Compilers: Ultrix C
Computers: DEC Vax 11/780 running Ultrix
Languages: C

Design and Programming Methodology CpSc 872 G P E Y 2
Textbooks: *Software Specification Techniques*
by Gehani, Narain and McGettrick, Andrew D.
Languages: Various specification languages

Software Verification, Validation, and Measurement CpSc 873 G P E O
Textbooks: *IEEE Tutorial: Software Testing and Validation Techniques*
by Miller, Edward and Howden, William E.

Cleveland State University James J. Nance College of Business Administration
Department of Computer and Information Science
Cleveland, OH, 44115, United States

Degrees: BS CIS, MS CIS

Contact: Prof. Heines, Thomas S.
Chairman
(216) 687-4760

Update: November 1987

Courses: **Structured Systems Analysis** CIS 433 U P E O 5
Textbooks: *Structured Analysis Methods for Computer Information Systems*
by Teague, Lavette C. and Pidgeon, Christopher

Structured Systems Design CIS 434 U P E O 5
Textbooks: *The Practical Guide to Structured Systems Design*
by Page-Jones, Meilir
Computers: IBM 3081

IBM PC
Languages: COBOL
PSL/PSA
Structured Architect
dBase III

Software Engineering CIS 620 G P R O 5
Textbooks: *System-370 Job-Control Language*
by Brown, Gary D.
The C Programming Language
by Kernighan, Brian and Ritchie, Dennis
Computers: IBM 3081
Vax 11/750

Systems Analysis and Design CIS 634 G P E O 5
Textbooks: *The Practical Guide to Structured Systems Design*
by Page-Jones, Meilir
Computers: IBM 3081
IBM PC
Languages: COBOL
PSL/PSA
Structured Architect
dBase III

College of William and Mary School of Arts and Sciences
Department of Computer Science
Williamsburg, VA, 23185, United States

Degrees: BS CS, MS CS, PHD CS

Contact: Prof. Noonan, Robert E.
Professor
(804) 253-4748

Update: May 1987

Courses: **Software Tools and Environment** CS 435, 535 B P E Y 4
Textbooks: *Software Tools in Pascal*
by Kernighan, Brian and Plauger, P.J.
Compilers: Sheffield Pascal
Computers: Primes
Languages: Pascal

Software Engineering CS 555 G P E O 10
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
Compilers: Sheffield Pascal
Computers: Primes
Languages: Pascal

Human Factors CS 575 G P E B 4
Textbooks: *Software Psychology: Human Factors in Computer and Information Systems*
by Shneiderman, Ben
Compilers: Sheffield Pascal
Computers: Primes
Languages: Pascal

Theory of Program Correctness CS 552 G P B O 4
Textbooks: *The Science of Programming*
by Gries, David
Compilers: Sheffield Pascal

Computers: Primes
Languages: Pascal

Program Testing CS 605 G P E B 4
Compilers: Sheffield Pascal
Computers: Primes
Languages: Pascal

Columbia University School of Engineering and Applied Sciences
Department of Computer Science
New York, NY, 10027, United States

Degrees: BA, BS, MS, PHD

Contact: Dr. Kaiser, Gail E.
Assistant Professor
(212) 280-3856

Update: None

Courses: **Software Design Laboratory** W3152 U P R Y
Computers: Unix

Software Engineering W4156 B P B Y

Programming Languages and Translators 1 W4115 B P R Y

Programming Environments and Software Tools E6123 G P E X

Special Projects in Computer Science W3998, W4995, others B N E D
Computers: Tops 20
Unix

Concordia University Faculty of Engineering and Computer Science
Department of Computer Science
Montreal, H3G 1M8, Canada

Degrees: BCS, MCS, PHD

Contact: Prof. Goyal, Pankaj
Associate Professor
(514) 848-3018

Update: June 1987

Courses: **Software Engineering** COMP 354 U P R T 1
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
Compilers: Sun-C
Sun-Pascal
Computers: Sun workstations (network)

Cornell University School of Engineering
Department of Computer Science
Ithaca, NY, 14853, United States

Degrees: BS, ME, PHD

Contact: Prof. Kozen, Dexter
Graduate Fields Representative for Computer Science
(607) 255-8593

Update: October 1987

Courses: **Introduction to Computer Programming** 100 U N R T 22
Textbooks: *Pascal: Introduction*
by Nance, Douglas W.
Compilers: Lightspeed Pascal System
Computers: Macintosh
Languages: Pascal

Computers and Programming 211 U P R T 22
Compilers: Mac Pascal
Computers: Macintosh
Languages: Guarded commands
Lisp
Pascal

Computer Organization 314 U P R T 22
Textbooks: *M68000 Instruction Manual*
Structured Computer Organization
by Tanenbaum, Andrew
Compilers: Lightspeed Pascal
Computers: Macintosh
Languages: Assembler
Pascal

Intro. Database Management Systems 432 B P E Y 5
Textbooks: *An Introduction to Database Systems*
by Date, C.J.
The C Programming Language
by Kernighan, Brian and Ritchie, Dennis
Compilers: CC
Computers: Vax
Languages: C
Pascal

Dartmouth College
Department of Mathematics and Computer Science
Hanover, NH, 03755, United States

Degrees: BA, MS, PHD

Contact: Prof. Drysdale, Scot
Associate Professor
(603) 646-2101

Update: November 1987

Courses: **Software Design and Implementation** CS 23 U P R O 1
Textbooks: *Programming Pearls*
by Bentley, Jon Louis
Software Engineering Concepts
by Fairley, Richard E.

Compilers: C
Lightspeed Pascal
Computers: Macintosh
Vax 11/785
Languages: C
Pascal

DePaul University School of Liberal Arts and Sciences
Department of Computer Science and Information Systems
Chicago, IL, 60604, United States

Degrees: BS, MS

Contact: Dr. Epp, Helmut P.
Department Chairman
(312) 341-8366

Update: May 1987

Courses: **Software Projects** 394 U P R O 5
Compilers: DEC
Computers: Vax 11/780
Languages: C

Software Engineering 365 U P R O 2
Textbooks: *Software Engineering*
by Sommerville, Ian
Compilers: TeleSoft
Computers: Vax 11/780
Languages: Ada

Software Measurement and Quality 366 U P E Y 1
Textbooks: *Software Engineering Metrics and Models*
by Conte, Samuel Daniel, Dunsmore, H.E., and Shen, V.Y.

Software Measurement and Quality 466 G P E Y 1
Textbooks: *Software Engineering Metrics and Models*
by Conte, Samuel Daniel, Dunsmore, H.E., and Shen, V.Y.

Programming in Ada 230 U N E Y 2
Textbooks: *Software Engineering with Ada*
by Booch, Grady
Compilers: TeleSoft
Computers: Vax 11/780
Languages: Ada

Drexel University College of Science
Department of Mathematics and Computer Science
Philadelphia, PA, 19104, United States

Degrees: BS CS, MS CS, PHD CS

Contact: Dr. Popyack, Jeffrey L.
Program Coordinator for Computer Science
(215) 895-2668

Update: May 1987

Courses: **Software Engineering I** N677 U P R Y 5
Textbooks: *Software Engineering*
by Sommerville, Ian
The Mythical Man-Month: Essays on Software Engineering
by Brooks, Frederick Phillips

Compilers: Prime C
Sheffield Pascal
Computers: Prime 9955
Languages: C
Pascal

Software Engineering II N678 U P E Y 5
Textbooks: *Software Engineering*
by Sommerville, Ian
The Mythical Man-Month: Essays on Software Engineering
by Brooks, Frederick Phillips
Compilers: Prime C
Sheffield Pascal
Computers: Apple Macintosh
IBM PC/XT
Prime 9955
Vax 11/780
Languages: C
Pascal

Software Engineering I M745 G P E B 5
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
Compilers: Prime C
Sheffield Pascal
Computers: Prime 9955
Languages: C
Pascal

Software Engineering II M746 G P E B 5
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
Compilers: Prime C
Sheffield Pascal
Computers: Prime 9955
Languages: C
Pascal

Topics In Software Engineering M748 G P E D 5

East Tennessee State University School of Applied Science and Technology
Department of Computer and Information Sciences
Programs in Computer Science and Information Science
Johnson City, TN, 37614, United States

Degrees: BS, MS

Contact: Dr. Bailes, Gordon L.
Chairman
(615) 929-5332

Update: May 1987

Courses: **Software Engineering** 222-3250 U P R T 7
Textbooks: *Systems Analysis and Design Methods*
by Whitten, Bentley, and Ho
Compilers: Ada-Telesoft
IBM PC
Computers: IBM 4341 under CMS
Languages: Ada
COBOL
PL/I

Information Analysis 222-5200 G P B Y 1
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
Structured Systems Analysis: Tools and Techniques
by Gane, Chris and Sarson, Trish
Computers: TI PC
Languages: Prokit Analyst

Systems Design 222-5300 G P B Y 1
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
Software Engineering with Ada
by Booch, Grady
Compilers: Janus Ada under MS-DOS
Telesoft Ada under VM/CMS
Computers: IBM 4341
TI PC
Vax
Languages: Ada
Prokit Analyst

Advanced Techniques in Ada 222-3310 U P E Y 10
Compilers: Ada-Telesoft
Computers: IBM 4341
Languages: Ada

Florida Atlantic University
Department of Computer Science
Boca Raton, FL, 33431, United States

Degrees: BS, MS, MCS

Contact: Dr. Coulter, Neal S.
Chairman
(305) 393-3180

Update: June 1987

Courses: **Software Engineering** CIS 6610 G N R O 8
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
Compilers: Ada
C
Pascal
Computers: Harris 800
PCs
Vax 8800
Languages: Ada

Principles of Software Design CIS 3611 U P R O 1
Compilers: Ada
Computers: AT&T 3B2
Vax 8800
Languages: Ada

Indiana University School of Arts and Sciences
Computer Science Department
Bloomington, IN, 47405, United States

Degrees: BA, BS, MS, PHD

Contact: Prof. Robertson, Edward
Professor and Chair
(812) 335-4954

Update: November 1987

Courses: **Information Systems I** C445 B P O Y 6
Textbooks: *An Introduction to Database Systems*
by Date, Chris J.
Database System Concepts
by Korth, Henry F. and Silberschatz, Abraham
Software Engineering
by Sommerville, Ian
Tools and Techniques for Structured Systems Analysis and Design
by Davis, William S.
Computers: PCs
Vax (VMS)
Languages: C
Fortran
Ingres
Modula-2
dBase III plus
rBase 5000

Information Systems II C446 B P O Y 6
Textbooks: *An Introduction to Database Systems*
by Date, Chris J.
Database System Concepts
by Korth, Henry F. and Silberschatz, Abraham
Software Engineering
by Sommerville, Ian
Tools and Techniques for Structured Systems Analysis and Design
by Davis, William S.
Computers: PCs
Vax (VMS)
Languages: C
Fortran
Ingres
Modula-2
dBase III plus
rBase 5000

Software Engineering Management C607 G P E Y 4
Textbooks: *Advanced Course on Software Engineering*
by Bauer, Friedrich Ludwig
Concise Notes on Software Engineering
by DeMarco, Tom

Current Practices in Software Development: A Guide to Successful Systems
by King, David
In Search of Excellence: Lessons From America's Best-Run Companies
by Peters, Thomas, and Waterman, Robert
Managing a Programming Project
by Metzger, Philip W.
Software Configuration Management
by Babich, Wayne A.
Software Engineering
by Sommerville, Ian
Software Engineering: Design, Reliability, and Management
by Shooman, Martin L.
Software Engineering Concepts
by Fairley, Richard E.
Software Engineering Economics
by Boehm, Barry W.
Software Psychology: Human Factors in Computer and Information Systems
by Shneiderman, Ben
Software Reliability
by Kopetz, H.
The Mythical Man-Month: Essays on Software Engineering
by Brooks, Frederick Phillips
The Psychology of Computer Programming
by Weinberg, G.M.
Tools and Techniques for Structured Systems Analysis and Design
by Davis, William S.

Software Engineering Management C608 G P E Y 4
Textbooks: *Advanced Course on Software Engineering*
by Bauer, Friedrich Ludwig
Concise Notes on Software Engineering
by DeMarco, Tom
Current Practices in Software Development: A Guide to Successful Systems
by King, David
In Search of Excellence: Lessons From America's Best-Run Companies
by Peters, Thomas, and Waterman, Robert
Managing a Programming Project
by Metzger, Philip W.
Software Configuration Management
by Babich, Wayne A.
Software Engineering
by Sommerville, Ian
Software Engineering: Design, Reliability, and Management
by Shooman, Martin L.
Software Engineering Concepts
by Fairley, Richard E.
Software Engineering Economics
by Boehm, Barry W.
Software Psychology: Human Factors in Computer and Information Systems
by Shneiderman, Ben
Software Reliability
by Kopetz, H.
The Mythical Man-Month: Essays on Software Engineering
by Brooks, Frederick Phillips
The Psychology of Computer Programming
by Weinberg, G.M.
Tools and Techniques for Structured Systems Analysis and Design
by Davis, William S.

Instituto Technologico y de Estudios Superiores de Monterrey
Graduate Program
Monterrey, N.L., 64849, Mexico

Degrees: MS

Contact: Dr. Scheel, Carlos
58-20-00 x161

Update: None

Courses: **Software Engineering** CB-131 G P E Y
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
Software Tools in Pascal
by Kernighan, Brian and Plauger, P.J.
Computers: Altos
Apple
IBM 4381
IBM PC

Iona College School of Arts and Science
Department of Computer and Information Sciences
Program in Computer Science
New Rochelle, NY, 10801, United States

Degrees: BA, BS, MS

Contact: Dr. Mallozzi, J.
Chair of Department
(914) 633-2578

Update: None

Courses: **Software Engineering** CIS 390 U P E Y
Computers: IBM mainframe

Introduction to Software Engineering CIS 640 G P E Y
Computers: IBM mainframe

Iowa State University School of Sciences and Humanities
Department of Computer Science
Program in Computer Science
Ames, IA, 50011, United States

Degrees: BS, MS, PHD

Contact: Prof. Oldehoeft, Arthur E.
Acting Chair
(515) 254-4377

Update: None

Courses: **Software Engineering** CS 411 U N E O 5
Textbooks: *Software Engineering: Design, Reliability, and Management*
by Shooman, Martin L.

Computers: HP 9000 Model 350
Languages: Ada

Software Engineering CS 512 G N E Y 2

Kent State University School of Arts and Sciences
Department of Mathematical Sciences
Program in Mathematics/Computer Science
Kent, OH, 44242, United States

Degrees: BS, MS, PHD

Contact: Prof. Rothstein, Michael
Assistant Professor
(216) 672-2430

Update: May 1987

Courses: **Software Engineering** 63251 G P E Y 5
Textbooks: *Software Engineering*
by Sommerville, Ian
Compilers: C
Pascal
Computers: Vax 750 (Unix)

Software Engineering Projects 43107 U P E D 2
Textbooks: *Software Engineering*
by Sommerville, Ian
Computers: Unix

Lehigh University College of Engineering and Physical Sciences
Department of Electrical Engineering
Bethlehem, PA, 18015, United States

Degrees: BS CS, BS CE, BS EE, MS CS, MS CE, MS EE, PHD CS, PHD CE, PHD EE

Contact: Prof. Cohen, Fred
Assistant Professor
(215) 758-5001

Update: May 1987

Courses: **Software Engineering** ECE 116 U P R Y 5
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
Computers: CYBER 180 Model 850
DEC 20 Model 2065
Zenith Z-100 PC series

Information Protection ECE 4?? G N E Y 3
Textbooks: *Introductory Information Protection*
by Cohen, Fred

Computers: 3B15
3B2
Cyber 850
DEC 20
Harris
Intel
PC
Sun
Vax
Zenith

Louisiana Tech University
Department of Computer Science
Ruston, LA, 71272, United States

Degrees: BS, MS

Contact: Prof. Schaar, Margaret
Assistant Professor
(318) 257-2298

Update: May 1987

Courses: **Structured Design** CS 203 U P R O 1
Computers: IBM 4341
IBM PC network
Languages: Pascal

Software Methodology CS 460 U P E Y 4
Textbooks: *Software Engineering*
by Sommerville, Ian
Computers: IBM 4341
IBM PC network
Languages: Ada

System Design CS 540 G P E Y 3
Compilers: Ada
Computers: IBM PC network
Languages: Ada

Marquette University College of Engineering
Department of Electrical Engineering and Computer Science
Program in Computer Science and Engineering
Milwaukee, WI, 53233, United States

Degrees: BS EE, MS EE, PHD EE

Contact: Dr. Niedejohn, Russell J.
Professor
(414) 224-1593

Update: May 1987

Courses: **Mini- and Microcomputers** EECS-190 B P B T 18
Textbooks: *Intel data books*
Computers: DEC PDP 11
Intel 8085
Languages: Assembly

Software Engineering EECS-211 G N E T 10
Compilers: Pascal
Computers: Vax
Languages: Pascal

Massachusetts Institute of Technology School of Engineering
Department of Electrical Engineering and Computer Science
Program in Computer Science
Cambridge, MA, 02139, United States

Degrees: BS, MS, PHD

Contact: Prof. Corbato, F. J.
Associate Head for Computer Science and Engineering
(617) 253-6001

Update: May 1987

Courses: **Introduction to Programming Concepts** 6.001 U N R T
Textbooks: *Structure and Interpretation of Computer Programs*
by Abelson, Harold, Sussman, Gerald Jay, and Sussman, Julie
Compilers: Scheme
Computers: HP
Languages: Scheme

Laboratory in Software Engineering 6.170 U P R T
Textbooks: *Abstraction and Specification in Program Development*
by Liskov, Barbara and Guttag, John
Compilers: CLU
Computers: DEC 20
Languages: CLU

Computer Language Engineering 6.035 U P O Y 5
Textbooks: *Compilers, Principles, Techniques, and Tools*
by Aho, Alfred V., Sethi, Ravi, and Ullman, Jeffrey D.
Compilers: CLU
Computers: DEC 20
Languages: CLU

McGill University School of Computer Science
Montreal, PQ, H3A 2K6, Canada

Degrees: MS, PHD

Contact: Prof. Madhavji, Nazim H.
Professor
(514) 398-7073

Update: None

Courses: **Advanced Topics (Software Engineering)** 308-762A G P E Y 4
Textbooks: *Software Development: A Rigorous Approach*
by Jones, C.B.
Software Engineering
by Sommerville, Ian
Software Engineering Environments
by Hunke, H.
Software Engineering with Modula-2 and Ada
by Wiener, Richard and Sincovec, Richard

Compilers: Cambridge Modula-2
Modula-2/68
Powell Modula-2
Computers: Sun 3
Vax 11/780
Languages: Modula-2

Advanced Topics (Programming Environments) 308-767B G P E Y 2
Textbooks: *Interactive Programming Environments*
by Barstow, David R., Shrobe, Howard E., and Sandewall, Erik
Compilers: Cambridge Modula-2
Modula-2/68
Powell Modula-2
Computers: Sun 3
Vax 11/780
Languages: Modula-2

Michigan State University College of Engineering
Computer Science Department
Program in Computer Science
East Lansing, MI, 48824-1027, United States

Degrees: BS, MS, PHD

Contact: Prof. Forsyth, John J.
Associate Professor and Associate Chairperson
(517) 355-1646

Update: October 1987

Courses: **Design of Language Processors I** CPS 451 U P R O 5
Textbooks: *Compiler Construction: Theory and Practice*
by Barrett and Couch
Software Engineering Concepts
by Fairley, Richard E.
Compilers: C
Computers: Sun 4 file server with workstations on Ethernet (C and Unix environment)
Languages: C

Design of Language Processors II CPS 452 U P R O 5
Textbooks: *Compiler Construction: Theory and Practice*
by Barrett and Couch
Software Engineering Concepts
by Fairley, Richard E.
Compilers: C
Computers: Sun 4 file server with workstations on Ethernet (C and Unix environment)
Languages: C

Design of Language Processors III CPS 453 U P R O 5
Textbooks: *Compiler Construction: Theory and Practice*
by Barrett and Couch
Software Engineering Concepts
by Fairley, Richard E.

Compilers: C
Computers: Sun 4 file server with workstations on Ethernet (C and Unix environment)
Languages: C

Michigan Technological University College of Sciences and Arts
Department of Computer Science
Houghton, MI, 49931, United States

Degrees: BS CS, MS CS

Contact: Prof. Ottenstein, Linda M.
Coordinator of Computer Science
(906) 487-2187

Update: None

Courses: **Software Engineering** CS550 G P R Y
Textbooks: *Software Engineering: A Practitioner's Approach* by Pressman, Roger S.
Computers: Vax 750 running Unix

Monmouth College
Department of Mathematics/Computer Science
West Long Branch, NJ, 07764, United States

Degrees: MS SE

Contact: Dr. Canavan, Bob
Professor of Mathematics and Computer Science
(201) 222-6600

Update: None

Courses: **Programming Languages** SE 509 G X R X

Network Design and Protocols I SE 510 G X R X

Network Design and Protocols II SE 511 G X R X

Algorithms Design and Analysis SE 512 G X R X

Computer Architecture SE 514 G X R X

Operating System Implementation SE 515 G X R X

Software Engineering I SE 516 G X R X

Software Engineering II SE 517 G X R X

Database Management SE 519 G X R X

System Project Implementation SE 525 G X R X

Montclair State College School of Mathematics and Computer Science
Department of Mathematics and Computer Science
Upper Montclair, NJ, 07043, United States

Degrees: BS, MA CS

Contact: Prof. Wolff, K.
Chairperson
(201) 893-5132

Update: None

Courses: **Software Engineering and Reliability** Y0701 594 G P E B
Textbooks: *Ethnotechnical Review Handbook*
by Freedman, Daniel P.
Software Engineering: A Practitioner's Approach
by Pressman, Roger S.
Software Engineering: Reliability, Development and Management
by Sherman, M.
Software Reliability: Principles and Practices
by Myers, Glenford J.

Systems Software Y0701 384 U P E Y
Textbooks: *Systems Programming*
by Donovan, John J.
Systems Software: An Introduction to Systems Programming
by Beck, Leland

National University School of Engineering and Computer Sciences
Master of Science in Software Engineering
San Diego, CA, 92108, United States

Degrees: MS SE

Contact: Prof. Sibley, Peter H. R.
Dean, School of Engineering and Computer Sciences
(619) 563-7123

Update: June 1987

Courses: **Principles of Software Engineering** CS 620 G N R T 2
Textbooks: *CMS Primer Release 3*
by IBM
Information System Specification and Design Road Map
by Connor, D.
Compilers: TeleSoft Ada
Computers: IBM 4381 with VM/CMS
Languages: Ada
CMS

Introduction to the Application Programming Language - Ada CS 621a G P R T 2
Textbooks: *Ada: An Introduction*
by Saib, S.
CMS Primer Release 3
by IBM
Reference Manual for the Ada Programming Language
ANSI/MIL-STD-1815A
Compilers: TeleSoft Ada
Computers: IBM 4381 with VM/CMS
Languages: Ada
CMS

Advanced Application Programming CS 621b G P R T 2
Textbooks: *Ada: An Introduction*
by Saib, S.
CMS Primer Release 3
by IBM
Reference Manual for the Ada Programming Language
ANSI/MIL-STD-1815A
Compilers: TeleSoft Ada
Computers: IBM 4381 with VM/CMS
Languages: Ada
CMS

Advanced Software Engineering CS 622 G P R T 2
Textbooks: *Software Engineering with Ada*
by Booch, Grady
Compilers: TeleSoft Ada
Computers: IBM 4381 with VM/CMS
Languages: Ada
CMS

Data Base Management I CS 623a G P R T 2
Textbooks: *An Introduction to Database Systems*
by Date, C.J.
Compilers: TeleSoft Ada
Computers: IBM 4381 with VM/CMS
Languages: Ada
CMS

Data Base Management II CS 623b G P R T 2
Textbooks: *An Introduction to Database Systems*
by Date, C.J.
Compilers: TeleSoft Ada
Computers: IBM 4381 with VM/CMS
Languages: Ada
CMS

Principles of Hardware and Software Integration CS 624 G P R T 2
Textbooks: *Computer System Architecture*
by Mano, M.
Compilers: TeleSoft Ada
Computers: IBM 4381 with VM/CMS
Languages: Ada
CMS

Expert Systems CS 625a G P R T 2
Textbooks: *Introduction to Expert Systems*
by Jackson, P.
Compilers: TeleSoft Ada
Computers: IBM 4381 with VM/CMS
Languages: Ada
CMS

Verification and Validation Techniques CS 626 G P R T 2
Textbooks: *Software Verification and Validation: Realistic Project Approaches*
by Deutsch, M.S.
Compilers: TeleSoft Ada
Computers: IBM 4381 with VM/CMS
Languages: Ada
CMS

Software Engineering Project I CS 627a G P R T 2
Textbooks: *Information System Specification and Design Road Map* by Connor, D.
Compilers: TeleSoft Ada
Computers: IBM 4381 with VM/CMS
Languages: Ada
CMS

Software Engineering Project II CS 627b G P R T 2
Textbooks: *Information System Specification and Design Road Map* by Connor, D.
Compilers: TeleSoft Ada
Computers: IBM 4381 with VM/CMS
Languages: Ada
CMS

Software Engineering Project III CS 627c G P R T 2
Textbooks: *Information System Specification and Design Road Map* by Connor, D.
Compilers: TeleSoft Ada
Computers: IBM 4381 with VM/CMS
Languages: Ada
CMS

New Mexico Institute of Mining and Technology
Department of Computer Science
Program in Computer Science
Socorro, NM, 87801, United States

Degrees: BS, MS, PHD

Contact: Prof. Popp, Carl
Vice President for Academic Affairs
(505) 835-5227

Update: October 1987

Courses: **Software Construction** CS328 U P E O 5
Textbooks: *The Mythical Man-Month: Essays on Software Engineering* by Brooks, Frederick Phillips
Compilers: C
Computers: Vax 750 under Unix
Languages: C

Design and Analysis of Software Systems CS528 G P E D 2
Compilers: C
Computers: Vax 750 under Unix
Languages: C

New Mexico State University School of Arts and Sciences
Department of Computer Science
Program in Computer Science
Las Cruces, NM, 88003, United States

Degrees: BS, MS, PHD

Contact: Prof. Dearholt, Don
Acting Department Head
(505) 646-3724

Update: October 1987

Courses: **Algorithmic Computations** CS 271 U P R T 3
Textbooks: *Programming and Problem Solving with Modula-2*
by Adams, Gabrini, and Kurtz
Compilers: Modula-2
Computers: IBM PC
Languages: Modula-2

Data Structures CS 272 U P R T 3
Textbooks: *Data Structures with Abstract Data Types and Modula-2*
by Weber, Neil W. and Stubbs, Daniel F.
Compilers: Modula-2
Computers: IBM PC
Languages: Modula-2

Software Development CS 371 U P R T 4
Textbooks: *Software Engineering with Modula-2 and Ada*
by Wiener, Richard S. and Sincovec, Richard F.
Compilers: Ada
Computers: IBM PC
SUN
Languages: Ada

North Carolina State University
Department of Computer Science (Undergraduate)
Program in Computer Studies (Graduate)
Raleigh, NC, 27695, United States

Degrees: BS, MS, MCS

Contact: Prof. Tai, K. C.
Professor
(919) 737-7862

Update: May 1987

Courses: **Software Engineering** CSE 510 G P E Y 9
Textbooks: *Software Engineering: Design, Reliability, and Management*
by Shooman, Martin L.
Software Engineering Concepts
by Fairley, Richard E.
Compilers: Pascal/VS
UCSD Pascal
Computers: IBM 4381 (VM/CMS)
MicroVax (Ultrix)
SAGE (UCSD p system)
Languages: Pascal

Software Engineering Project CSC 472 U P E Y 3
Compilers: Verdix C
Computers: MicroVax (Ultrix)
Languages: C and Unix Shell

Introduction to Programming Environment CSC 471 U P E Y 3
Compilers: Verdix C
Computers: MicroVax (Ultrix)
Languages: C and Unix Shell

Software Engineering with Ada CSC 481 U P E Y 3
Textbooks: *Software Engineering with Ada*
by Booch, Grady
Compilers: Verdix Ada
Computers: MicroVax (Ultrix)
Languages: Ada

North Dakota State University School of Science and Mathematics
Department of Computer Science
Fargo, ND, 58105, United States

Degrees: BS, MS, PHD

Contact: Prof. Magel, Kenneth
Director of Computer Science
(701) 237-8189

Update: None

Courses: **Software Development** 513 G P X Y
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
Computers: Vax 11/780 running Berkeley Unix 4.3
Zenith PCs running MS DOS 3.1

Systems Analysis 213 U P X Y
Computers: IBM 3081 using CMS

Operating Systems Implementation 475 U P X O
Textbooks: *XINU*
Computers: Vax 11/780

Northeastern University College of Computer Science
Boston, MA, 02115, United States

Degrees: BS, MS

Contact: Prof. Campagnoni, F. R.
Assistant Professor
(617) 437-3824

Update: None

Courses: **Software Design and Development** COM1205 U P R O
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
Software Tools in Pascal
by Kernighan, Brian and Plauger, P.J.

Computers: Apollo workstations
IBM 4381
IBM PC
Local area networks
Pyramid 98X
Vax 11/780

Senior Project COM1600 U P E O
Textbooks: *Software Reliability: Principles and Practices*
by Myers, Glenford J.
Computers: Apollo workstations
DEC Vax
IBM 4381
IBM PC
Local area networks
Pyramid 98X

Software Design and Development COM3205 G P R O
Textbooks: *Software Engineering: Design, Reliability, and Management*
by Shooman, Martin L.
The Mythical Man-Month: Essays on Software Engineering
by Brooks, Frederick Phillips

Computers: Apollo workstations
DEC Vax
IBM 4381
IBM PC
Local area networks
Pyramid 98X

Northrop University
Department of Computer and Information Science
Los Angeles, CA, 90045, United States

Degrees: BS CS, MS CS, MS IS

Contact: Dr. Teitell, Murray
Chairman
(213) 641-3470

Update: None

Courses: **Software Engineering I** CS-475 U P E Y
Textbooks: *Software Engineering*
by Sommerville, Ian

Software Engineering II CS-476 U P E Y

Advanced Software Design CS-477 U P E Y
Textbooks: *Structured Systems Analysis: Tools and Techniques*
by Gane, Chris and Sarson, Trish
Computers: IBM PC with Graphics

Nova University Center for Computer-Based Learning
Department of Computer Science
Program in Computer Science
Ft. Lauderdale, FL, 33314, United States

Degrees: BS CS, MS CS, SCD CS

Contact: Dr. Simco, Edward R.
Director
(305) 475-7563

Update: None

Courses: **Software Engineering** CIS 680 G N R O
Textbooks: *Research Directions in Software Technology*
by Wegner, Peter
Software Engineering
by Jensen, Randall W. and Tonies, Charles C.
Computers: Vax 11/780 (Unix 4.2 BSD)

Software Engineering Implementation CIS 682 G P E D
Textbooks: *Research Directions in Software Technology*
by Wegner, Peter
Software Engineering
by Jensen, Randall W. and Tonies, Charles C.
Computers: Vax 11/780 (Unix 4.2 BSD)

Software Engineering CIS 770 G P R Y
Computers: Vax 11/780 (Unix 4.2 BSD)

Software Engineering Project CIS 870 G P R Y
Computers: Vax 11/780 (Unix 4.2 BSD)

Oregon State University School of Science
Department of Computer Science
Program in Computer Systems
Corvallis, OR, 97331, United States

Degrees: BS, MS, PHD

Contact: Prof. Lewis, Ted
Professor
(503) 754-3273

Update: None

Courses: **Software Design** CS 319 U P R T
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
Computers: IBM PC
Macintosh
Unix (HP)

Software Systems: Methodology CS 561 G P R Y
Computers: Macintosh
Languages: C
Modula-2
Pascal

Software Systems: Design CS 562 G P R Y
Computers: Macintosh
Languages: C
Modula-2
Pascal

Polytechnic University, Brooklyn Campus School of Engineering
Department of Electrical Engineering and Computer Science
Computer Science Division
Brooklyn, NY, 11201, United States

Degrees: BS CS, BS EE, MS CS, MS IS, PHD CS

Contact: Prof. Shooman, Martin L.
Professor
(516) 454-5099

Update: None

Courses: **Software Engineering I** CS606 G P B O
Textbooks: *Software Engineering: Design, Reliability, and Management* by Shooman, Martin L.
Computers: Software Engineering Laboratory

Software Engineering II CS607 G P E B
Textbooks: *Software Engineering: Design, Reliability, and Management* by Shooman, Martin L.
Computers: Software Engineering Laboratory

Polytechnic University, Farmingdale Campus School of Engineering
Department of Electrical Engineering and Computer Science
Computer Science Division
Farmingdale, NY, 11735, United States

Degrees: BS CS, BS EE, MS CS, MS IS, PHD CS

Contact: Prof. Shooman, Martin L.
Professor
(516) 454-5099

Update: None

Courses: **Software Engineering I** CS606 G P B O
Textbooks: *Software Engineering: Design, Reliability, and Management* by Shooman, Martin L.
Computers: Software Engineering Laboratory

Software Engineering II CS607 G P E B
Textbooks: *Software Engineering: Design, Reliability, and Management* by Shooman, Martin L.
Computers: Software Engineering Laboratory

Polytechnic University, Westchester Campus School of Engineering
Department of Electrical Engineering and Computer Science
Computer Science Division
White Plains, NY, 10605, United States

Degrees: BS CS, BS EE, MS CS, MS IS, PHD CS

Contact: Prof. Shooman, Martin L.
Professor
(516) 454-5099

Update: None

Courses: **Software Engineering I** CS606 G P B Y
Textbooks: *Software Engineering: Design, Reliability, and Management*
by Shooman, Martin L.
Computers: Software Engineering Laboratory

Purdue University (Entry 1) School of Science
Department of Computer Science
West Lafayette, IN, 47907, United States

Degrees: BS, MS, PHD

Contact: Dr. Dunsmore, H. E.
Associate Professor
(317) 494-1996

Update: None

Courses: **Software Engineering** CS 404 U P E T
Textbooks: *Software Engineering*
by Sommerville, Ian
Computers: DEC Vax 11/780 (Unix OS)

Software Metrics CS 510 G P E Y
Textbooks: *Software Engineering Metrics and Models*
by Conte, Samuel Daniel, Dunsmore, H.E., and Shen, V.Y.
Computers: DEC Vax 11/780 (Unix OS)

Systems Programming CS 403 U P R T
Textbooks: *Operating System Concepts*
by Peterson, James and Silberschatz, Abraham
Computers: DEC Vax 11/780 (Unix OS)

Programming Languages CS 565 G P R T
Textbooks: *Principles of Programming Languages*
by Tennent, R.
Computers: DEC Vax 11/780 (Unix OS)

Information Systems CS 442 U P E T
Textbooks: *Management Info. Systems: Conceptual Foundations, Structure, and Development*
by Davis, Gordon Bitter and Olson, Margrethe H.
Computers: DEC Vax 11/780 (Unix OS)

Purdue University (Entry 2) School of Industrial Engineering
West Lafayette, IN, 47907, United States

Degrees: BS, MS, PHD

Contact: Prof. Leimkuhler, F. F.
Head
(317) 494-5444

Update: June 1987

Courses: **Systems Analysis and Design I** IE 231 U P R T 1
Textbooks: *Learning to Program in C*
by Plum, Thomas
Compilers: Unix

Computers: Gould NP1
Vax 11/780
Languages: C

Programming Languages for Artificial Intelligence IE 547 G P E T 3
Textbooks: *LISP Craft*
by Wilensky, Robert
Computers: Vax 11/750
Vax 11/780
Languages: Lisp
Prolog

Human-Computer Interaction IE 557 G P E Y 7
Computers: IBM PC/AT
Languages: Fortran

Cognitive Engineering of Interactive Software IE 559 G P E Y 3
Textbooks: *Human-Computer Dialogue Design*
by Ehrich, Roger W. and Williges, Robert C.
Computers: IBM PC/AT
Languages: Fortran

Queen's University Faculty of Arts and Science
Department of Computing and Information Science
Kingston, ON, K7L 3N6, Canada

Degrees: BS, MS

Contact: Dr. Lamb, David
Administrative Liason for SEI Academic Affiliate Program
(613) 545-6067

Update: June 1987

Courses: **Modules and Specifications** CISC 322 U P E Y 1

Software Engineering CISC 422/CISC 838 B P E Y 3
Textbooks: *Software Engineering*
by Lamb, David
Compilers: IBM Pascal/VS
Computers: IBM 3081 under VM/CMS
Languages: Pascal/VS

Rensselaer Polytechnic Institute (Entry 1) School of Science
Department of Computer Science
Troy, NY, 12180, United States

Degrees: BS, MS, PHD

Contact: Prof. Fiaherty, Joseph E.
Chairman
(518) 276-6348

Update: October 1987

Courses: **Design and Documentation** 66.496 U P R Y 1
Computers: Modula-2
Unix WWB & PWB

Masters Project 66.698 G N R O 15

Rensselaer Polytechnic Institute (Entry 2) School of Engineering
Department of Electrical, Computer and Systems Engineering
Troy, NY, 12180, United States

Degrees: BS, ME, MS, PHD EE, PHD CSE, DENG

Contact: Prof. Gerhardt, Lester A.
Chairman
(518) 266-6316

Update: None

Courses: **Software Engineering I** 35.677 G P E Y
Textbooks: *Classics in Software Engineering*
by Yourdon, Edward N.
Software Engineering: A Practitioner's Approach
by Pressman, Roger S.

Software Engineering II 35.678 G P E Y
Textbooks: *Classics in Software Engineering*
by Yourdon, Edward N.
Software Engineering: A Practitioner's Approach
by Pressman, Roger S.

Rochester Institute of Technology School of Computer Science
Graduate Department of Computer Science
Rochester, NY, 14623, United States

Degrees: BS CS, MS CS

Contact: Dr. Anderson, Peter
Chairperson
(716) 475-2529

Update: None

Courses: **Software Engineering I** ICSS-801 G N E T
Textbooks: *Software Engineering: Design, Reliability, and Management*
by Shooman, Martin L.

Software Engineering Laboratory ICSS-802 G P E Y
Textbooks: *Reference Manuals for Software Systems*
Computers: Pyramid Unix
Vax VMS

Rogers State College
Computer Science Division
Claremore, OK, 74017, United States

Degrees: AAS CAD, AAS CET, AAS CP, AS CS

Update: None

Courses: **Software Engineering (Systems Analysis and Design)** CS 2133 X X R X

Royal Melbourne Institute of Technology Information Technology Division
Melbourne, Victoria, 3001, Australia

Degrees: BS CS, MS CS

Contact: Prof. Montgomery, Anthony Y.
Head
660-2943

Update: None

Courses: **Software Engineering 1** CS280 U X R X

Software Engineering 2 CS381 U X E X
Textbooks: *Models and Measurements for Quality Assessment of Software*
by Mohanty, S.N.

Software Engineering 3 CS 387 U X E X
Textbooks: *The Mythical Man-Month: Essays on Software Engineering*
by Brooks, Frederick Phillips

San Jose State University School of Science
Department of Mathematics and Computer Science
Programs in Computer Science and Mathematics
San Jose, CA, 95192, United States

Degrees: BA, BS, MA, MS

Contact: Prof. Phillips, Veril L.
Chairman
(408) 277-2411

Update: None

Courses: **Advanced Programming** Math 146B U P B T
Textbooks: *Advanced Programming and Problem Solving with Pascal*
by Schneider, G. Michael and Bruell, Steven C.

Graduate Seminar in Computer Science Math 295 G N R T

Sangamon State University School of Liberal Arts and Sciences
Department of Mathematical Systems
Springfield, IL, 62708, United States

Degrees: BA CS, MS M

Contact: Prof. Lasby, Gary
Convener
(217) 786-6770

Update: None

Courses: **Introduction to Software Engineering** MSY 478 U P E Y

Software Engineering MSY 578 G P E Y

Seattle University School of Science and Engineering
Department of Software Engineering/Computer Science
Program in Software Engineering
Seattle, WA, 98122, United States

Degrees: MSE

Contact: Dr. Mills, Everald E.
Director
(206) 296-5510

Update: June 1987

Courses: **Technical Communication** ESW 508 G N R Y 8
Textbooks: *The Elements of Style*
by Strunk, William, and White, E. B.
Computers: HP 3000
PCs
Vax 11/750
Languages: C
Pascal

Software Systems Analysis ESW 510 G P R Y 8
Textbooks: *Essential Systems Analysis*
by McMenamin, Stephen M. and Palmer, John F.
Structured Analysis and System Specification
by DeMarco, Tom
Computers: HP 3000
PCs
Vax 11/750
Languages: C
Pascal

System Design Methodology ESW 512 G P R Y 8
Textbooks: *The Practical Guide to Structured Systems Design*
by Page-Jones, Meilir
Computers: HP 3000
PCs
Vax 11/750
Languages: C
Pascal

Programming Methodology ESW 514 G P R Y 8
Textbooks: *Writing Efficient Programs*
by Bentley, Jon Louis
Computers: HP 3000
PCs
Vax 11/750
Languages: C
Pascal

Software Quality Assurance ESW 516 G P R Y 8
Textbooks: *Software Reliability Guidebook*
by Glass, R.
Computers: HP 3000
PCs
Vax 11/750
Languages: C
Pascal

Software Metrics ESW 518 G P R Y 8
Textbooks: *Software Engineering Economics*
by Boehm, Barry W.
Computers: HP 3000
PCs
Vax 11/750
Languages: C
Pascal

Software Project Management ESW 531 G P R Y 8
Computers: HP 3000
PCs
Vax 11/750
Languages: C
Pascal

System Procurement and Contract Acquisition ESW 533 G P E Y 8
Textbooks: *Data Processing Contracts: Structure, Contents, and Negotiations*
by Brandon, Dick H. and Segelstein, S.
Computers: HP 3000
PCs
Vax 11/750
Languages: C
Pascal

Formal Methods ESW 543 G P R Y 8
Textbooks: *Structured Programming, Theory and Practice*
by Linger, Richard C., Mills, Harlan D., and Witt, Bernard I.

Computers: HP 3000
PCs
Vax 11/750
Languages: C
Pascal

Human Factors in Computing ESW 560 G P E Y 8
Textbooks: *Software Psychology: Human Factors in Computer and Information Systems*
by Shneiderman, Ben
Computers: HP 3000
PCs
Vax 11/750
Languages: C
Pascal

Data Security and Privacy ESW 562 G P E Y 8
Textbooks: *Security, Accuracy, and Privacy in Computer Systems*
by Martin, James
Computers: HP 3000
PCs
Vax 11/750
Languages: C
Pascal

Software Engineering Project I ESW 585 G P R Y 8
Languages: C
Pascal

Software Engineering Project II ESW 586 G P R Y 8
Languages: C
Pascal

Software Engineering Project III ESW 587 G P R Y 8
Languages: C
Pascal

Special Topics ESW 591 G N E D 8
Languages: C
Pascal

Special Topics ESW 592 G N E D 8
Languages: C
Pascal

Special Topics ESW 593 G N E D 8
Languages: C
Pascal

Independent Study ESW 596 G N E D 8
Languages: C
Pascal

Independent Study ESW 597 G N E D 8
Languages: C
Pascal

Independent Study ESW 598 G N E D 8
Languages: C
Pascal

Shippensburg University School of Arts and Sciences
Department of Mathematics and Computer Science
Program in Computer Science
Shippensburg, PA, 17257, United States

Degrees: BS CS

Contact: Dr. Bell, Howard
Department Chairman
(717) 532-1431

Update: June 1987

Courses: **Software Design for Information Systems** CPS305 U P E Y 3
Textbooks: *Software Engineering: A Practitioner's Approach* by Pressman, Roger S.
Compilers: Unix
Computers: AT&T 3B2
Microcomputers
Sperry 1100
Languages: C
Fortran
Pascal

Research in Computer Science CPS405 U N E O 5
Compilers: Unix
Computers: AT&T 3B2
Microcomputers
Sperry 1100
Languages: C
Fortran
Pascal

Southern Illinois University at Edwardsville School of Sciences
Department of Computer Science
Edwardsville, IL, 62026, United States

Degrees: BA, BS CS

Contact: Dr. Hattemer, J. R.
Chair
(618) 692-2386

Update: October 1987

Courses: **Software Design and Development** CS 424 U P E Y 4
Textbooks: *Software Design and Development*
by Gilbert, Philip

Topics in Software Engineering CS 524 G N E O 1
Compilers: Ada
Computers: MicroVax 2
Languages: Ada

Southwest Texas State University School of Science
Department of Computer Science
San Marcos, TX, 78666, United States

Degrees: BA, BS, MA, MS

Contact: Dr. Hwang, C.J.
Chairman
(512) 245-3409

Update: June 1987

Courses: **Software Engineering** CS 3398 U P E Y 4
Textbooks: *Software Engineering*
by Sommerville, Ian
Software Engineering: A Practitioner's Approach
by Pressman, Roger S.

Compilers: C
Fortran
Pascal
Computers: Vax 8600 with VMS

Advanced Software Engineering CS 5398 G P E Y 2
Textbooks: *Principles of Information System Analysis and Design*
by Mills, Linger, and Hevner
Software Engineering with Ada
by Booch, Grady
Compilers: Vax Ada
Vax C
Computers: Vax 8600 with VMS
Languages: Ada
C

Stanford University School of Engineering
Department of Computer Science
Stanford, CA, 94305, United States

Degrees: BS CS, BS CSE, MS, MS AI, PHD

Contact: Prof. Reges, Stuart
Assistant Chairman for Education
(415) 723-9798

Update: None

Courses: **Introduction to Software Engineering** CS106A U N B T
Textbooks: *Pascal*
by Reges, Stuart
Computers: DEC system 20

Introduction to Software Engineering (continuation) CS106B U P B T
Textbooks: *Intermediate Problem Solving and Data Structures*
by Helman, Paul and Veroff, Robert
Computers: DEC system 20

Object-Oriented Design with Ada CS149 B P E Y
Textbooks: *Software Engineering with Ada*
by Booch, Grady
Computers: Vax 8650

Software Engineering Laboratory CS247 B P E Y
Computers: Microcomputer (varies)

State University of New York at Binghamton
The Thomas J. Watson School of Engineering, Applied Science and Technology
Department of Computer Science
Binghamton, NY, 13901, United States

Degrees: BS, MSAT CS, PHDAT CS

Contact: Prof. Piatkowski, Thomas F.
Chairman
(607) 777-4802

Update: May 1987

Courses: **Principles of Software Engineering** CS-342 U P E Y 3
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
Compilers: C
IBM PC Basic
Modula-2
PL/I
Pascal
Turbo Pascal
Computers: IBM 4381
IBM PC
Vax 11/785

Software Engineering I CS-545 G N E Y 3
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
Software Engineering with Ada
by Booch, Grady
Compilers: ALSYS Ada
DEC Ada
Computers: IBM PC/AT
Vax 780
Languages: Ada

Software Engineering II CS-546 G P E Y 1
Textbooks: *Software Engineering: Design, Reliability, and Management*
by Shooman, Martin L.
Compilers: ALSYS Ada
DEC Ada
Computers: IBM PC/AT
Vax 780
Languages: Ada

State University of New York at Stony Brook College of Engineering and Applied Science
Department of Computer Science
Stony Brook, NY, 11794, United States

Degrees: BS, MS, PHD

Contact: Prof. Henderson, Peter B.
Graduate Program Director
(516) 632-8470

Update: May 1987

Courses: **Techniques of Software Design** MSC-520 G N R Y 10
Textbooks: *IEEE Tutorial on Software Engineering*
by Wasserman, Anthony I. and Freeman, Peter
Software Engineering Concepts
by Fairley, Richard E.
Compilers: Berkeley Unix Pascal
Computers: Vax's and Sun workstations under Unix 4.3 BSD
Languages: CLU
Modula-2
Pascal

Stephen F. Austin State University School of Business Administration
Department of Computer Science
Nacogdoches, TX, 75962, United States

Degrees: MS CS

Contact: Dr. Grout, Jarrell C.
Professor
(409) 568-1876

Update: July 1987

Courses: **Software Development Principles** 513 G N E B 1
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.

Software Development Applications 525 G P E B 1
Textbooks: *Software Engineering with Ada*
by Booch, Grady
Compilers: Ada
Pascal
Computers: Honeywell mainframe computer
Various microcomputers
Languages: Ada
Pascal

Temple University School of Computer Science and Engineering
Department of Computer and Information Sciences
Programs in Computer Science and Information Science
Philadelphia, PA, 19122, United States

Degrees: BA, BBA, MA, MS BA, PHD, PHD BA

Contact: Ms. Shteir, Laurie
(215) 787-8450

Update: None

Courses: **Data Structures and Algorithms** 223 U P R T
Textbooks: *Data Structures: Algorithms and Program Style*
by Korsh, James
Computers: CDC Cyber (750)

Compiler Design 324 U P E Y
Textbooks: *Algorithms + Data Structures = Programs*
by Wirth, Niklaus
Assemblers, Compilers, and Program Translation
by Calingaert, Peter
Computers: Cyber 750

Topics in High Order Languages and Translation 665 G P E X
Textbooks: *Lecture Notes in Computer Science*
by Goos, G. and Hartmanis, J.

Theorem Proving and Program Verification 675 G P E X
Textbooks: *An Introduction to the General Theory of Algorithms*
by Machtey, M. and Young, P.
The Design of Well-Structured and Correct Programs
by Alagic, Saud and Arbib, Michael A.

Knowledge Based Systems 682 G P E X
Textbooks: *Expert Systems, Concepts and Examples*
by Alty and Coombs
Programming in Prolog
by Clocksin, W.F. and Mellish, C.S.
Computers: OPS5
Prolog

Software Engineering 690 G N E X
Textbooks: *Handbook of Software Engineering*
by Vick, Charles R. and Ramamoorthy, C. V.
Software Engineering
by Sommerville, Ian
Computers: OPS5
Pascal
VMS

COBOL Information Retrieval and File Management 153 U P R T
Textbooks: *Advanced Structured COBOL*
by Welburn, Tyler
Data Management and File Processing
by Loomis, Mary E.
Computers: IBM 4381

Information Systems Analysis and Design 201 U P R T
Textbooks: *Elements of Systems Analysis*
by Gorc and Stubbe

Project in Information Science 301 U P R T
Computers: AT&T 3B2
PCs

Data Management Systems 330 U P R T
Textbooks: *Database Management*
by McFadden, F.R. and Hoffer, J.A.
Computers: AT&T 3B2

Software Design 338 U P E Y
Textbooks: *Reliable Software Through Composite Design*
by Myers
Software Engineering: A Practitioner's Approach
by Pressman, Roger S.
Structured Design
by Yourdon, Edward N. and Constantine, Larry
Computers: IBM 4381 PCs

Texas Christian University AddRan College
Computer Science Department
Ft. Worth, TX, 76129, United States

Degrees: MSDD

Contact: Dr. Comer, James R.
Chairman
(817) 921-7166

Update: October 1987

Courses: **Introduction to Software Design and Development** SODE 5143 G N R Y 8
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.

Ada Design and Development SODE 6013 G P E D 3
Textbooks: *Software Engineering with Ada*
by Booch, Grady
Compilers: DEC Ada
Computers: DEC Vax 11/780
Languages: Ada

Software Quality Assurance and Metrics SODE 6043 G P E D 3
Textbooks: *Software Metrics*
by Gilb, Tom

Security and Privacy SODE 6053 G P E D 3
Textbooks: *Foiling the System Breakers: Computer Security and Access Control*
by Lobel, Jerome

Modern Software Requirements and Design Techniques SODE 6113 G P R Y 7
Textbooks: *Software Design: Methods and Techniques*
by Peters, Lawrence J.
Structured Requirements Definition
by Orr, Kenneth T.

Applied Design, Programming and Testing Techniques SODE 6123 G P R Y 7
Textbooks: *IEEE Tutorial on Software Maintenance*
by Parikh, Girish and Zvegintzov, Nicholas
The Art of Software Testing
by Myers, Glenford J.

Management of Software Development SODE 6153 G P R Y 7
Textbooks: *Controlling Software Projects*
by DeMarco, Tom
Management Methodology for Software Product Engineering
by Gunther, Richard C.

Economics of Software Development SODE 6163 G P R Y 7
Textbooks: *Software Engineering Economics*
by Boehm, Barry W.

Effective Communications in Small Groups SODE 6193 G P E D 2
Textbooks: *Task Design: An Integrative Approach*
by Griffin, Ricky W.

Computer Facilities Management SODE 6033 G P E D 1
Textbooks: *Data Center Operations*
by Schaeffer, Howard

Software Implementation Project I SODE 7113 G P R Y 6

Software Implementation Project II SODE 7123 G P R Y 6

The Claremont Graduate School
Department of Information Science
Program in Information Science
Claremont, CA, 91711, United States

Degrees: MS CIS, MS MIS, PHD

Contact: Prof. Gray, Paul
Chair
(714) 621-8209

Update: September 1987

Courses: **Information Systems-Analysis and Design** IS 305 G N R Y 4
Textbooks: *Structured Analysis Methods for Computer Information Systems*
by Teague, Lavette C. and Pidgeon, Christopher
Systems Analysis and Design Methods
by Whitten, Bentley, and Ho
Computers: IBM PC/AT
Vax 11/785
Languages: Excelerator

Systems Planning IS 328 G P R Y 4
Textbooks: *Reading in Systems Planning (IS 328)*
by Olfman
Using Excelerator for Systems Analysis and Design
by Whitten and Bentley
Computers: IBM PC/AT
Vax 11/785
Languages: Excelerator

Large Scale Software Development IS 362 G N R Y 3
Textbooks: *Concise Notes on Software Engineering*
by DeMarco, Tom
Computers: IBM PC/AT
IBM System 38
Vax 11/785
Languages: MAPICS

The George Washington University School of Engineering and Applied Science
Department of Electrical Engineering and Computer Science
Washington, DC, 20052, United States

Degrees: BS CS, MS CS, SCD

Contact: Prof. Lang, R.
Chairman
(202) 676-6083

Update: None

Courses: **System Software and Software Engineering** C.Sci. 151 U P R O
Computers: ATT B03
IBM 4341

The Hartford Graduate Center School of Engineering and Science
Department of Computer and Information Science
Program in Computer and Information Science
Hartford, CT, 06120, United States

Degrees: MCS

Contact: Dr. Danchak, Michael
Dean of the School of Engineering and Science
(203) 548-2450

Update: None

Courses: **Software Engineering I** 35677 G P B T
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
Computers: AT&T PC6300s
Apollo DOMAIN IX workstations (12)
Sun3 workstations (33)
Unix Vax 11/750 BSD 4.3 with NFS

Software Engineering II 35678 G P E Y
Textbooks: *A Practical Handbook For Software Development*
by Birrell, N.D., and Ould, Martyn A.

Computers: AT&T PC6300s
Apollo DOMAIN IX workstations (12)
Sun3 workstations (33)
Unix Vax 11/750 BSD 4.3 with NFS

Software Project Management 66696 G P E B
Textbooks: *IEEE Tutorial: Software Management*
by Reifer, Donald
Software Engineering Economics
by Boehm, Barry W.
The Software Development Project: Planning and Management
by Bruce, Phillip and Pederson, Sam M.

The Pennsylvania State University College of Science
Computer Science Department
Program in Computer Science
University Park, PA, 19802, United States

Degrees: BS, MS, PHD

Contact: Dr. Lambert, Joseph M.
Department Head
(814) 865-9505

Update: June 1987

Courses: **Software Design Methods** 498 U P E Y 1
Textbooks: *Software Engineering: Design, Reliability, and Management*
by Shooman, Martin L.
Compilers: IBM Ada
Computers: IBM 3090
Languages: Ada

The University of Alberta School of Science
Department of Computing Science
Edmonton, AB, T6G 2H1, Canada

Degrees: BS, MS, PHD

Contact: Prof. White, Lee J.
Chairman
(403) 432-4589

Update: October 1987

Courses: **Software Engineering** CMPUT 401 U P R T 3
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
Compilers: Modula-2
Pascal
Computers: Macintosh
Sun workstations (Unix OS)
Languages: Modula-2
Pascal

Interactive Programming Environments CMPUT 652 G P E B 2
Textbooks: *Interactive Programming Environments*
by Barstow, David R., Shrobe, Howard E., and Sandewall, Erik

Compilers: Cornell program synthesizer generator
Smalltalk
Computers: Vax systems (Unix OS)
Languages: Smalltalk

Software Testing CMPUT 501 G P E B 2
Textbooks: *Computer Program Testing*
by Chandrasekaran, B. and Radicchi, Sergio
Software Testing Techniques
by Beizer, Boris
Computers: Vax systems (Unix OS)

Specification and Verification CMPUT 508 G P E Y 2
Textbooks: *Communicating Sequential Processes*
by Hoare, C.A.R.
The Logic of Programming
by Hehner, E.C.
The Science of Programming
by Gries, David
Computers: Vax computer systems (Unix OS)
Languages: Various specification languages

The University of Texas at Arlington The College of Engineering
Department of Computer Science Engineering
Arlington, TX, 76019, United States

Degrees: BS, MS CS, MS CSE, ME CSE, PHD CS, PHD CSE

Contact: Dr. Grabow, Paul C.
Assistant Professor
(817) 273-2348

Update: June 1987

Courses: **Methods in Software Engineering** CSE 4310 U P E Y 5
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
The Mythical Man-Month: Essays on Software Engineering
by Brooks, Frederick Phillips
Compilers: Pascal
Computers: Vax 11/780
Languages: Pascal

Software Engineering CS 5324 G P R O 5
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
The Mythical Man-Month: Essays on Software Engineering
by Brooks, Frederick Phillips
Compilers: Ada
Pascal
Computers: Vax 11/780
Languages: Ada
Gypsy
ISML
Prolog

Advanced Software Engineering CS 6324 G P E Y 5
Textbooks: *Applying Software Engineering Principles with Fortran*
by Marca, David
Compilers: Ada
Pascal

Computers: Vax 11/780
Languages: Ada
Pascal

Special Topic: Software Engineering in Ada CSE 6392 G P E O 1
Textbooks: *Programming in Ada*
by Barnes, John Gilbert Presslie
Compilers: DEC Ada
Computers: Vax 11/780
Languages: Ada

The University of Texas at Dallas School of Natural Sciences and Mathematics
Program in Computer Science
Richardson, TX, 75083, United States

Degrees: BS, MS, PHD

Contact: Dr. Ntafos, Simeon
Associate Professor and Program Head
(214) 690-2181

Update: None

Courses: **Software Engineering** CS 6354 G N E Y
Textbooks: *Software Engineering*
by Sommerville, Ian

Software Validation, Verification, and Performance Measurement CS 6367 G P E O

The University of Texas at San Antonio College of Science and Engineering
Division of Mathematics, Computer Science and Systems Design
Program in Computer Science
San Antonio, TX, 78285, United States

Degrees: BS, MS

Contact: Dr. Hanavan, E. Patrick
(512) 691-4452

Update: None

Courses: **Programming Methodology** CS 3773 U P R O
Textbooks: *Automated Data Systems Documentation Standards*
Software Engineering: A Practitioner's Approach
by Pressman, Roger S.
The Elements of Programming Style
by Kernighan, Brian and Plauger, P.J.
Computers: IBM 4381 with CMS
Vax 11/780 with VMS

Software Design CS 5103 G P E O
Textbooks: *The Program Development Process: Part II: The Programming Team*
by Aron, Joel D.
Computers: IBM 4381 with CMS

Software Configuration Management CS 5143 G P E O
Textbooks: *Software Configuration Management: An Investment in Product Integrity*
by Bersoff, Edward et al.

Software Testing CS 5133 G P E O
Textbooks: *The Art of Software Testing*
by Myers, Glenford J.
Computers: Vax 11/780 with VMS

The Wichita State University College of Liberal Arts and Sciences
Department of Computer Science
Wichita, KS, 67208, United States

Degrees: BA, BS, MS, MCS

Contact: Dr. Tomayko, James E.
Director, Software Engineering Program
(316) 689-3156

Update: May 1987

Courses: **Introduction to Software Engineering** CS 580 B P E T 7
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
The Mythical Man-Month: Essays on Software Engineering
by Brooks, Frederick Phillips
Compilers: Ada
Pascal
Computers: IBM 3031D
Vax 750
Languages: Ada
Pascal

Ada and Software Engineering CS 611 G P E Y 3
Textbooks: *Software Engineering with Ada*
by Booch, Grady
Compilers: ALSYS
Computers: IBM at CLONE
Languages: Ada

Applications Systems Analysis CS 684 G P E B 6

Software Testing and Reliability CS 882 G P R Y 6
Compilers: Ada
Pascal
Computers: Vax
Languages: Ada
Pascal

Requirements Specification and Design CS 8xx G P R Y
Computers: Vax

Union College School of Computer Science
Department of Electrical Engineering and Computer Science
Schenectady, NY, 12308, United States

Degrees: BS, MS

Contact: Prof. Hannay, David
Co-Chair EE/CS Department
(518) 370-6270

Update: None

Courses: **Software Engineering** CSC-260 U P X Y
Textbooks: *C Primer*
by Hancock, L. and Krieger, M.
Classics in Software Engineering
by Yourdon, Edward N.
Computers: Vax

United States Air Force Academy
Department of Computer Science
Program in Computer Science
USAFA, CO, 80840, United States

Degrees: BS CS

Contact: Lt Col Richardson, William E.
Deputy Department Head
(303) 472-3590

Update: May 1987

Courses: **Systems Analysis and Design I** Comp Sci 453 U P R Y 6
Textbooks: *Structured Systems Analysis: Tools and Techniques*
by Gane, Chris and Sarson, Trish

Systems Analysis and Design II Comp Sci 454 U P R Y 6
Textbooks: *The Practical Guide to Structured Systems Design*
by Page-Jones, Meilir

University of Alabama at Birmingham School of Natural Sciences and Mathematics
Department of Computer and Information Sciences
Birmingham, AL, 35294, United States

Degrees: BS, MS, PHD

Contact: Dr. Jones, Warren T.
Professor and Chairman
(205) 934-2213

Update: June 1987

Courses: **Formal Specifications and Software Development** CS 520 G N R Y 8
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
Computers: Sequent Balance 21000
Vax 11/750
Languages: Ada
Modula-2

University of Alabama in Huntsville School of Mathematics and Natural Sciences
Computer Science Department
Huntsville, AL, 35899, United States

Degrees: MS, PHD

Contact: Dr. Shiva, S. G.
Chairman
(215) 895-6088

Update: None

Courses: **Software Engineering** CS 650 G N E Y
Textbooks: *Software Engineering*
by Jensen, Randall W. and Tonies, Charles C.

Advanced Software Engineering CS 750 G P E D
Textbooks: *Software Engineering: Design, Reliability, and Management*
by Shooman, Martin L.

University of Alaska-Fairbanks College of Liberal Arts
Department of Mathematical Sciences
Program in Computer Science
Fairbanks, AK, 99775-1110, United States

Degrees: BS CS

Contact: Prof. Gatterdam, R. W.
Professor of Computer Science
(907) 474-6174

Update: June 1987

Courses: **Software Engineering** CS 401 U N E Y 5
Textbooks: *Software Engineering*
by Sommerville, Ian

University of Arizona College of Arts and Sciences
Department of Computer Science
Tucson, AZ, 85721, United States

Degrees: MS CS, PHD CS

Contact: Prof. Andrews, Gregory R.
Acting Department Head
(602) 621-6613

Update: May 1987

Courses: **Software Tools** Computer Science 430 G P R T 12
Textbooks: *Introducing the UNIX System*
by McGilton, Henry and Morgan, Rachel
The C Programming Language
by Kernighan, Brian and Ritchie, Dennis
The Elements of Programming Style
by Kernighan, Brian and Plauger, P.J.
The UNIX Programming Environment
by Kernighan, Brian and Pike, Rob
Writing Efficient Programs
by Bentley, Jon Louis
Compilers: C
Computers: Vax running Berkeley Unix
Languages: C

Translators and Systems Software Computer Science 453 G P R T 12
Compilers: C
Computers: Vax running Berkeley Unix
Languages: C

Advanced Topics in Software Systems Computer Science 630 G P E D 12
Compilers: C
Computers: Vax running Berkeley Unix
Languages: C

University of Arkansas Fulbright College of Arts and Sciences
Department of Computer Science
Program in Computer Science
Fayetteville, AR, 72701, United States

Degrees: BS, MS

Contact: Prof. Starling, Greg
Chairman
(501) 575-6427

Update: August 1987

Courses: **Software Design and Development** 4833 U N E Y 2
Textbooks: *Software Design Strategies*
by Bergland, Glenn D. and Gordon, Ronald D.
Compilers: Fortran
PL/I
Pascal
Computers: IBM VM/CMS
PC MS DOS
Languages: Fortran
PL/I
Pascal

Software Development CSAS 4003 U P E D 2
Compilers: PL/I
Pascal
Computers: IBM 4381
Languages: PL/I
Pascal

Structured Programming II CSAS 1003 U P R Y 2
Compilers: Pascal
Computers: IBM 4381
Languages: Pascal

University of California, Berkeley College of Engineering
Department of Electrical Engineering and Computer Science
Program in Computer Science
Berkeley, CA, 94720, United States

Degrees: BEECS, MS, ME, PHD, DENG

Contact: Mrs. Webster, Betty
CS Scheduling Assistant
(415) 643-6130

Update: None

Courses: **Introduction to Computer Science** CS60C U P R O
Textbooks: *LISP Craft*
by Wilensky, Robert
Oh! Pascal!
by Cooper, Doug and Clancy, Michael
Computers: LISP
Pascal

Data Structures and Advanced Programming CS160 U P R O
Textbooks: *Advanced Programming and Problem Solving with Pascal*
by Schneider, G. Michael and Bruell, Steven C.
Data Structures and Program Design
by Kruse, Robert L.
Computers: Pascal

University of California, Irvine
Department of Information and Computer Science
Program in Computer Science
Irvine, CA, 92717, United States

Degrees: BS, MS, PHD

Contact: Prof. Leveson, Nancy
Associate Professor
(714) 856-7403

Update: July 1987

Courses: **Project in System Design** ICS 195 U N O T
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
Computers: Sun Unix
Vax Unix

Software Engineering A 245A G N X Y
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
Computers: Sun Unix
Vax Unix

Software Engineering B 245B G N X Y
Textbooks: *IEEE Tutorial: Software Testing and Validation Techniques*
by Miller, Edward and Howden, William E.

University of Central Florida (Entry 1)
Department of Computer Engineering (CEBA 207)
Program in Computer Engineering
Orlando, FL, 32816, United States

Degrees: BS E, MS, MS E, PHD

Contact: Dr. Linton, Darrell G.
Associate Professor of Engineering
(305) 275-2236

Update: None

Courses: **Software Engineering I** ECM 5806 B P B Y
Textbooks: *Ada: An Introduction*
by Saib, S.
Software Engineering Concepts
by Fairley, Richard E.
Computers: Gould 32/6780 (ISCS Ada translator)
IBM 4381 (TeleSoft Ada compiler)
Vax 11/750 (Ada compiler)

Software Engineering II ECM 6807 G P E Y
Textbooks: *Ada: An Introduction*
by Saib, S.
Software Engineering Concepts
by Fairley, Richard E.

Computers: Gould 32/6780 (ISCS Ada translator)
IBM 4381 (TeleSoft Ada compiler)
Vax 11/750 (Ada compiler)

University of Central Florida (Entry 2) College of Arts and Sciences
Department of Computer Science
Orlando, FL, 32816, United States

Degrees: MS CS, PHD CS

Contact: Prof. Cottrell, Larry K.
Graduate Program Coordinator
(305) 275-2341

Update: None

Courses: **Software Engineering** COP 5632 G N E X

Software Tools COP 5682 G P E X

University of Colorado at Colorado Springs School of Engineering and Applied Science
Department of Computer Science
Colorado Springs, CO, 80933, United States

Degrees: BS, MS

Contact: Dr. Sebesta, Robert W.
Chair
(303) 593-3325

Update: None

Courses: **Introduction to Software Engineering** CS 330 U N R T
Textbooks: *Software Engineering with Ada and Modula-2*
by Wiener, Richard, and Sincovec, Richard
Computers: MicroVax

Systems Engineering Management CS 435/535 B N E A

Software Engineering Laboratory CS 436/536 B P E A

Software Specification and Requirements Analysis CS 531 G N E A

Software Design CS 532 G N E A

Software Testing CS 533 G N E A

Software Maintenance CS 534 G N E A

Topics and Readings in Software Engineering CS 630 G N E D

University of Delaware College of Arts and Science
Department of Computer and Information Sciences
Newark, DE, 19716, United States

Degrees: BA, BS, MS, PHD

Contact: Prof. Bell, Eugene J.
Assistant Professor
(302) 451-1957

Update: None

Courses: **Advanced Topics: Software Engineering** CIS 879 G N E O
Computers: C
Modula-2
Vax Unix

University of Denver Faculty of Mathematical and Computer Sciences
Department of Mathematics and Computer Science
Program in Computer Science
Denver, CO, 80208, United States

Degrees: MS, PHD

Contact: Prof. Dorn, William S.
Chairperson
(303) 871-2392

Update: May 1987

Courses: **Software Engineering I** COMP 4380 G P E O 1
Compilers: Pascal
Computers: Vax 11/750
Languages: Pascal

University of Evansville School of Engineering and Computer Science
Department of Computing Science
Evansville, IN, 47714, United States

Degrees: BA, BS, MS CSED, MS MIS

Contact: Dr. Mitchell, William
(812) 479-2650

Update: None

Courses: **Software Engineering** CS 325 U P R O

Software Engineering Project CS 494/495/497 U P R T

Software Engineering CS 521 G N B O
Textbooks: *Software Engineering: Design, Reliability, and Management*
by Shooman, Martin L.

University of Houston - Clear Lake School of Sciences and Technologies
Department of Technologies
Houston, TX, 77058, United States

Degrees: BA CIS, BS CS, MA CIS, MS CS

Contact: Dr. Collins, George C.
Director, Programs in Technologies
(713) 488-9386

Update: None

Courses: **Ada Programming Language** CSCI 3432 U P R T
Textbooks: *Ada as a Second Language*
by Cohen, Norman H.
Reference Manual for the Ada Programming Language
ANSI/MIL-STD-1815A
Computers: Vax 11/785

Topic: Software Engineering Methodology CSCI 4931 U P E Y
Textbooks: *Handbook of Software Engineering*
by Vick, Charles R. and Ramamoorthy, C. V.
Software Engineering
by Sommerville, Ian

Topic: Software Engineering Tools and Environments CSCI 5931 G P E Y
Computers: AIE
ALS
Rational

University of Idaho College of Engineering
Department of Computer Science
Programs in Scientific Computing and Data Processing
Moscow, ID, 83843, United States

Degrees: BS CS, MS CS

Contact: Dr. Dickinson, John
Chairman
(208) 885-6589

Update: October 1987

Courses: **CS Design I** CS 480 U N R T 6
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
Computers: HP 9000
HP 9836
IBM 4381
IBM PC
Vax 11/780

Languages: COBOL
Fortran
Lisp
Pascal
dBase
rBaseE

CS Design II CS 481 U N R T 6
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
Computers: HP 9000
HP 9836
IBM 4381
IBM PC
Vax 11/780
Languages: COBOL
Fortran
Lisp
Pascal
dBase
rBase

Software Engineering CS 410/510 B N E Y 6
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.

Model for Software Project Management (Software Metrics) CS 511 G P E Y 3
Textbooks: *Software Engineering Metrics and Models*
by Conte, Samuel Daniel, Dunsmore, H.E., and Shen, V.Y.

Software Quality Assurance and Testing CS 404/504 B P E Y 1
Textbooks: *Software System Testing and Quality Assurance*
by Beizer, Boris
Compilers: Turbo Pascal
Computers: IBM PC
Languages: Pascal

University of Illinois at Chicago College of Engineering
Department of Electrical Engineering and Computer Science (M/c 154)
Program in Software Engineering
Chicago, IL, 60680, United States

Degrees: MS CS, PHD CS

Contact: Dr. Chang, Carl K.
Assistant Professor
(312) 996-4860

Update: May 1987

Courses: **Introduction to Software Engineering** EECS 274 U P R O 7
Textbooks: *Software Engineering*
by Sommerville, Ian
Compilers: Unix BSD 4.2 C
Computers: Vax 11/750

Advanced Topics in Software Engineering EECS 481 G P E Y 3
Textbooks: *Software Engineering: Analysis and Verification*
by Lewis
Compilers: Unix BSD 4.2 C
Computers: Vax 11/750

Software Engineering Environments EECS 482 G P E Y 4
Textbooks: *IEEE Tutorial on Software Engineering Environments*
Software Engineering Environments
by Hunke, H.
Compilers: Unix BSD 4.2 C
Computers: Vax 11/750

University of Illinois at Urbana-Champaign
Department of Computer Science
Urbana, IL, 61801, United States

Degrees: MS, MS TCS, MCS, PHD

Contact: Dr. Kamin, Samuel N.
Associate Professor of Computer Science
(217) 333-8069

Update: May 1987

Courses: **Software Engineering** CS 327 B P E Y 5
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
Software Engineering Concepts
by Fairley, Richard E.

Compilers: C
Lisp
Pascal
Computers: IBM PC/RT

University of Iowa School of Engineering
Department of Electrical and Computer Engineering
Iowa City, IA, 52242, United States

Degrees: BS EE, MS, PHD

Contact: Prof. Reddy, S. M.
Professor and Chairman
(319) 353-7379

Update: None

Courses: **Introduction to Software Design** 55:033 U P R T
Textbooks: *Introduction to Programming and Problem Solving with Pascal*
by Schneider, G. Michael, Weingart, Steven W., and Perlman, David M.
M68000 8-, 16-, 32-Bit Microprocessor's Programmer's Reference Manual
by Motorola, Inc.
Computers: M68000 based microprocessor systems
Vax 11/750 (4.2 BSD Unix) Cross development environment

University of Maryland Division of Computer, Mathematical, and Physical Sciences
Department of Computer Science
College Park, MD, 20742, United States

Degrees: BS, MS, PHD

Contact: Dr. Rombach, H. Dieter
Assistant Professor
(301) 454-8974

Update: May 1987

Courses: **Software Design and Development** CMSC 435 U N E T 5
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
Computers: IBM mainframe
Vax
Languages: Ada
C
Pascal

Software Design and Development in Ada CMSC 838 G P E D 2
Textbooks: *Programming in Ada*
by Barnes, John Gilbert Presslie
Software Engineering with Ada
by Booch, Grady
Compilers: Verdix Ada
Computers: Vax 8600
Languages: Ada

A Quantitative Approach to Software Management and Engineering CMSC 735 G P E Y 1
Textbooks: *IEEE Tutorial on Models and Metrics for Software Management and Engineering*
by Basili, Victor R.
Software Engineering Metrics and Models
by Conte, Samuel Daniel, Dunsmore, H.E., and Shen, V.Y.

University of Massachusetts School of Engineering
Department of Electrical and Computer Engineering
Program in Electrical Engineering
Amherst, MA, 01003, United States
Degrees: BS CSE, BS EE, MS, PHD

Contact: Prof. Pradhan, Dhiraj K.
Professor
(413) 545-0160

Update: None

Courses: **Design and Analysis of Computer Algorithm** ECE 672 G P E D
Textbooks: *The Design and Analysis of Computer Algorithms*
by Aho, Alfred V., Hopcroft, John E. and Ullman, Jeffrey D.
Computers: Data General Eagle

Programming Structures ECE 544 G P E T

Algorithms and Data Structures ECE 597B G N E Y
Textbooks: *Algorithms*
by Sedgewick, Robert
Computers: Vax

Performance Evaluations ECE 673 G P E Y

University of Massachusetts at Boston
Department of Mathematics and Computer Science
M.S. in Computer Science
Boston, MA, 02125, United States

Degrees: BS, MS

Contact: Dr. Simovici, Dan
Professor and Director of the Graduate Program
(617) 929-7966

Update: None

Courses: **Software Engineering I** 650 G P R Y
Computers: Unix on Vax 11/750

Software Engineering II 660 G P R Y
Computers: Unix on Vax 11/750

Software Engineering Laboratory I 651 G P R Y
Computers: Unix on Vax 11/750

Software Engineering Laboratory II 661 G P R Y
Computers: Unix on Vax 11/750

University of Michigan-Dearborn School of Engineering
Department of Industrial and Systems Engineering
Dearborn, MI, 48128, United States

Degrees: BSE ISE, MSE ISE

Contact: Dr. Kachhal, S. K.
Chairman
(313) 593-5272

Update: None

Courses: **Software Engineering** I&SE 553 G P E Y
Textbooks: *Controlling Software Projects: Management Measurement and Estimation*
by DeMarco, Tom
Software Design and Development
by Gilbert, Philip
Computers: Michigan Terminal System (Amdahl)

University of Minnesota Institute of Technology
Department of Computer Science
Program in Computer Science
Minneapolis, MN, 55455, United States

Degrees: BS, MS, PHD

Contact: Dr. Fox, David
Head, Computer Science
(612) 625-0726

Update: June 1987

Courses: **Software Engineering (I)** Csci 5180 B P E Y 5
Textbooks: *Abstraction and Specification in Program Development*
by Liskov, Barbara and Guttag, John
Compilers: Ada
Computers: Sun
Languages: Ada
MSG

Software Engineering (II) Csci 5181 B P E Y 5
Textbooks: *Software Engineering with Ada*
by Booch, Grady
Compilers: Ada
Computers: Sun
Languages: Ada
MSG

Software Engineering (III) Csci 5199 B P E Y 2
Textbooks: *Software Engineering with Ada*
by Booch, Grady
Software Testing and Evaluation
by DeMillo, R.A. et al.
Software Validation: Inspection - Testing - Verification - Alternatives
by Hausen, H.L.
The Art of Software Testing
by Myers, Glenford J.

Compilers: Ada
Computers: Sun
Languages: Ada
MSG

Software Requirement, Design and Maintenance Csci 5199/8199 B P E B 2
Textbooks: *Handbook of Software Engineering*
by Vick, Charles R. and Ramamoorthy, C.V.
Software Design Strategies
by Bergland, Glenn D. and Gordon, Ronald D.

Software Verification and Validation, Metrics Csci 5199/8199 B P E B 2
Textbooks: *IEEE Tutorial: Software Testing and Validation Techniques*
by Miller, Edward and Howden, William E.
Software Engineering Metrics and Models
by Conte, Samuel Daniel, Dunsmore, H.E., and Shen, V.Y.
Software Testing and Evaluation
by DeMillo, R.A. et al.
Software Validation: Inspection - Testing - Verification - Alternatives
by Hausen, H.L.
The Art of Software Testing
by Myers, Glenford J.

Software Engineering with Ada Csci 5199/8199 B P E Y 2
Textbooks: *Software Engineering with Ada*
by Booch, Grady
Compilers: Ada
Computers: Sun
Languages: Ada

Software Specification Csci 5199/8199 B P E Y 2
Textbooks: *Software Specification Techniques*
by Gehani, Narain and McGettrick, Andrew D.

University of New Mexico - Los Alamos
Department of Computer Science
Los Alamos, NM, 87544, United States

Degrees: AAS CS

Contact: Ms. Coop, Angela
Associate Director for Instruction
(505) 662-5919

Update: July 1987

Courses: **Introduction to Software Engineering** CS 260 U P R Y 1
Textbooks: *Software Engineering*
by Sommerville, Ian
Compilers: C
Unix BSD Pascal
Computers: Vax 11/750
Languages: Ada
C
Pascal

University of North Carolina at Chapel Hill School of Arts and Sciences
Department of Computer Science
Chapel Hill, NC, 27514, United States

Degrees: BS, MS, PHD

Contact: Prof. Brooks, F. P.
Kenan Professor
(919) 962-2148

Update: June 1987

Courses: **Software Engineering Laboratory** Comp 145 B P R Y 22
Textbooks: *IEEE Tutorial on Software Design Techniques*
by Freeman, Peter and Wasserman, Anthony I.
The Mythical Man-Month: Essays on Software Engineering
by Brooks, Frederick Phillips
Computers: Masscomps
Suns
Vaxen
Languages: C
C++
Smalltalk

University of Oregon School of Arts and Sciences
Department of Computer and Information Science
Eugene, OR, 97403, United States

Degrees: BA, BS, MA, MS, PHD

Contact: Prof. Eliason, Alan
Associate Professor
(503) 686-4408

Update: May 1987

Courses: **Software Methodology I** CIS 422 U P R T 10
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
The Practical Guide to Structured Systems Design
by Page-Jones, Meilir
Writing Efficient Programs
by Bentley, Jon Louis
Computers: Apollo workstations
Tektronic 4404 Pegasus
Vax 11/750
Languages: C
RAPID
Smalltalk

Software Methodology II CIS 423 U P E O 10
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
The Practical Guide to Structured Systems Design
by Page-Jones, Meilir
Writing Efficient Programs
by Bentley, Jon Louis
Computers: Apollo workstations
Microcomputers
Tektronic 4404 Pegasus
Vax 11/750
Languages: C
RAPID
Smalltalk

Software Engineering CIS 510 G N R Y 10
Textbooks: *Interactive Programming Environments*
by Barstow, David R., Shrobe, Howard E., and Sandewall, Erik
Proceedings
by ACCA
Software Specification Techniques
by Gehani, Narain and McGettrick, Andrew D.
Computers: Vax 11/750
Languages: C
RAPID
Smalltalk

University of Ottawa Faculty of Science and Engineering
Department of Computer Science
Ottawa, ON, K1N 9B4, Canada

Degrees: BS, MCS

Contact: Dr. Raymond, Jacques
Chairman of the Department
(613) 564-5420

Update: None

Courses: **Problem Solving and Software Design** CSI 1100 U N X Y
Textbooks: *Algorithm Design I*

by Birta, L.G. and Probert, R.L.
CPN User's Manual
by Hickey, Peter
Pascal Plus Data Structures
by Dale, N. and Lilly, S.C.

Computing Systems Design and Implementation CSI 1101 U P X Y

Software Engineering CSI 3111 U N X O
Textbooks: *Software Engineering Methodology*
by Turner, Ray

Software Engineering: Practice CSI 4112 U N X X
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.

Software Testing: Theory and Practice CSI 5111 G N X X

Software Engineering CSI 5112 G N X X

University of Pennsylvania School of Engineering and Applied Science
Department of Computer and Information Science
Program in Computer Science and Engineering
Philadelphia, PA, 19104, United States

Degrees: BSE

Contact: Dr. Badler, Norman I.
Undergraduate Chair
(215) 898-5862

Update: None

Courses: **Interactive System Design** CSE 280 U P E B
Textbooks: *Interactive Programming Environments*
by Barstow, David R., Shrobe, Howard E., and Sandewall, Erik
Computers: Color Graphics
IBM PC/XT/AT
Vax 8650

University of Pittsburgh School of Library and Information Science
Interdisciplinary Department of Information Science
Pittsburgh, PA, 15260, United States

Degrees: BS, MS, PHD

Contact: Prof. Williams, James G.
Chairman
(412) 624-9418

Update: June 1987

Courses: **Software Engineering** IS 279 G P E Y 4
Textbooks: *Program Development*
by Gilbert, Philip
Compilers: C
COBOL
Fortran
Pascal

Computers: IBM PC
Mac
Vax 780
Vax 8650
Languages: C
Pascal

Systems Analysis, Design and Development IS 272 G P E O 5
Textbooks: *Systems Development: Analysis, Design, and Implications*
by Eliason, Alan L.
Compilers: C
COBOL
Fortran
Pascal
Computers: IBM PC
Mac
Vax 780
Vax 8650
Languages: C
Pascal

University of Regina Faculty of Science
Department of Computer Science
Regina, SK, S4S 0A2, Canada

Degrees: BA, BS, MS

Contact: Dr. Maguire, R. B.
Department Head
(306) 584-4632

Update: October 1987

Courses: **Business Information Systems** CS270 U P R T 10
Textbooks: *Systems Analysis and Design*
by Capron, H.L.
Computers: IBM PC AT
Languages: Accelerator InTech

Introduction to Systems Programming CS330 U P E Y 5
Textbooks: *Operating System Concepts*
by Peterson, James L. and Silberschatz, Abraham
Compilers: Unix C
Computers: Berkeley 4.2 Unix on Vax 750
Languages: C programming language

Advanced Systems Analysis and Design CS372 U P E Y 3
Textbooks: *The Practical Guide to Structured Systems Design*
by Page-Jones, Meilir
Compilers: Unix C
Computers: Berkeley 4.2 Unix on Vax 750
Languages: C programming language

Project Management for Data Processing Applications CS373 U P E B 1
Textbooks: *Information Resource Management*
by Hussain, Donna and Hussain, K.M.

Advanced Concepts in Programming Languages CS440 U P E Y 4
Textbooks: *Programming Language Concepts*
by Ghezzi, Carlo and Jazayeri, Mehdi
Compilers: Ada

Lisp
Prolog
Computers: Vax 8600
Languages: Ada
Lisp
Prolog

University of Saskatchewan School of Engineering
Department of Computational Science
Program in Computer Science
Saskatoon, SK, S7N 0W0, Canada

Degrees: BS CS, BC CS, BO

Contact: Prof. Sorenson, Paul
Head
(306) 966-4886

Update: None

Courses: **Computer Systems** CMPT 230.6 U P R Y
Computers: Vax 8600

Information Systems Analysis and Design CMPT 477.6 U P E Y
Textbooks: *Structured Design*
by Yourdon, Edward, and Constantine, Larry
Computers: PC (Zeniths)
Sun workstations
Vax 8600

Information Systems CMPT 876.3 G P E Y
Computers: Sun workstations
Vax 8600

University of South Florida College of Engineering
Department of Computer Science and Engineering
Tampa, FL, 33620, United States

Degrees: MS, PHD

Contact: Dr. Varanasi, M. R.
Graduate Program Coordinator
(813) 974-3033

Update: None

Courses: **Software Engineering I - Basic Principles and Formal Methods** COP 6630 G N E B

Software Engineering II - Tools and Applied Techniques COP 6634 G P E B

University of Southern California (Entry 1) School of Engineering
Department of Industrial and Systems Engineering
Program in Human Factors
Los Angeles, CA, 90089, United States

Degrees: MS ISE

Contact: Dr. Chigrell, Mark H.
(213) 743-2705

Update: None

Courses: **Intelligent Interfaces** ISE 578 G P E Y
Textbooks: *Turbo Prolog*
Computers: IBM PCs with 512K and graphics running Turbo Prolog

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University of Southern California (Entry 2) School of Engineering
Computer Science Department
Los Angeles, CA, 90089, United States

Degrees: MS CS, PHD CS

Contact: Dr. Scacchi, Walt
Assistant Professor
(213) 743-5501

Update: None

Courses: **Introduction to Software Engineering** CS 201L U P R T
Textbooks: *Software Tools in Pascal*
by Kernighan, Brian and Plauger, P.J.
The Practical Guide to Structured Systems Design
by Page-Jones, Meilir
Computers: DEC Vax 11/750
IBM PC
IBM XT

Design and Construction of Large Software Systems CS 477L U P E Y
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
The C Programming Language
by Kernighan, Brian and Richie, Dennis
Writing Efficient Programs
by Bentley, Jon Louis
Computers: AT&T workstations
DEC Vax 11/750

Management of Computing: Theory and Practice CS 510 G N E Y
Computers: AT&T workstations
DEC Vax 11/750
IBM AT
IBM PC
IBM RT
IBM XT

Design and Construction of Large Software Systems CS 577a G N E Y
Textbooks: *IEEE Tutorial on Software Design Techniques*
by Freeman, Peter and Wasserman, Anthony I.
Interactive Programming Environments
by Barstow, David R., Shrobe, Howard E., and Sandewall, Erik
The UNIX Programming Environment
by Kernighan, Brian and Pike, Rob
Computers: AT&T workstations
DEC Vax 11/750

Design and Construction of Large Software Systems CS 577b G P E Y
Textbooks: *A Practical Guide to Unix System V*
by Sobell, Mark
Advanced Unix Programming
by Rockkind
C, a Reference Manual
by Harbison, Samuel P. and Steele, Guy L.
Computers: AT&T workstations
DEC Vax 11/750

University of Tennessee at Chattanooga School of Engineering
Department of Computer Science
Chattanooga, TN, 37403, United States

Degrees: BS CS, MS CS

Contact: Dr. Thompson, Jack
Head, Computer Science
(615) 755-4329

Update: July 1987

Courses: **Software Engineering I** 350 U P R O 8
Textbooks: *Systems Analysis and Design Methods*
by Whitten, Bentley, and Ho

Compilers: PL/I
Computers: IBM 4381
Languages: PL/I

Software Engineering II 450 B P E Y 1
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
Compilers: PL/I
Computers: IBM 4381
Languages: PL/I

University of Texas at Austin College of Natural Science
Department of Computer Science
Austin, TX, 78712, United States

Degrees: BA, MS, PHD

Contact: Dr. Werth, Laurie
Lecturer
(512) 471-7316

Update: May 1987

Courses: **Software Engineering** CS378 U N E T 6
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
Software Engineering Concepts
by Fairley, Richard E.
Compilers: DFD Tools
Pascal
Computers: DEC 20
Vax with Unix or VMS
Languages: Ada

Large Scale Software Development CS 395T G N E B 2
Textbooks: *Managing a Programming Project*
by Metzger, Philip W.

Software Engineering Economics EE 382M G N E Y 3
Textbooks: *Software Engineering Economics*
by Boehm, Barry W.
Software Engineering Metrics and Models
by Conte, Samuel Daniel, Dunsmore, H.E., and Shen, V.Y.

University of Victoria School of Arts and Sciences
Department of Computer Science
Victoria, BC, V8W 2Y2, Canada

Degrees: BS, MS

Contact: Dr. Hoffman, Daniel
Assistant Professor
(604) 721-7222

Update: June 1987

Courses: **Software Engineering** CSC 365 U P R T 5
Textbooks: *The Mythical Man-Month: Essays on Software Engineering*
by Brooks, Frederick Phillips

Compilers: C
Pascal on Unix 4.2
Computers: Pyramid
Vax 11/780
Languages: C
Pascal

Implementation of Software Engineering Methods CSC B P E Y 2
Compilers: C
Computers: Pyramid
Sun
Vax
Languages: C

University of Virginia School of Engineering and Applied Science
Department of Computer Science
Charlottesville, VA, 22903, United States

Degrees: MS CS, MCS, PHD

Contact: Prof. Cook, Robert P.
Chairman
(804) 924-7605

Update: June 1987

Courses: **Software Engineering Laboratory** CS 485 U P R Y 5
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
Compilers: Sheffield Pascal
Computers: Prime
Languages: Pascal

Software Engineering CS 685 G P E Y 5
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
Compilers: AT&T C
Sheffield Pascal
Computers: AT&T 3B5s
Prime
Languages: Ada
C
Pascal

Software Engineering CS 885 G N E D

University of Washington College of Arts and Sciences
Department of Computer Science
Seattle, WA, 98195, United States

Degrees: BS CS, MS CS, PHD CS

Contact: Prof. Pattis, Richard
Acting Assistant Professor
(206) 545-1218

Update: October 1987

Courses: **Software Engineering** CSci 503 G P E Y 2
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
The Mythical Man-Month: Essays on Software Engineering
by Brooks, Frederick Phillips

Compilers: Turbo Pascal
Unix C
Xerox XDE

Computers: IBM PC/AT
Vax 785
Xerox Dandelion
Languages: C
Mesa
Pascal

University of Waterloo Faculty of Mathematics
Department of Computer Science
Waterloo, ON, N2L 3G1, Canada

Degrees: BM, MM, PHD

Contact: Dr. Dyment, Doug
Associate Chairman
(519) 888-4451

Update: None

Courses: **Applications Software Engineering** CS 430 U P E O
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.

Business System Analysis CS 432 U P E Y

Software System Design and Implementation CS 446 and CS 646 B P E Y
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.

Techniques in Systems Analysis CS 482 U P E O

University of Wisconsin-Madison College of Engineering
Department of Industrial Engineering
Madison, WI, 53706, United States

Degrees: MS, PHD

Contact: Prof. Gustafson, David H.
Department Chairman
(608) 262-3768

Update: October 1987

Courses: **Computer Methods in Industrial Engineering** 490-612-9 G N B Y 8
Textbooks: *Software Engineering*
by Sommerville, Ian
Compilers: Turbo Pascal
Computers: IBM PC
Languages: Pascal

University of Wisconsin-Milwaukee School of Engineering and Applied Science
Department of Electrical Engineering and Computer Science
Milwaukee, WI, 53201, United States

Degrees: MS CS, PHD

Contact: Dr. Vairavan, K.
Chair - CS
(414) 963-5183

Update: None

Courses: **Introduction to Software Engineering** 262-536 B P X Y
Textbooks: *Software Engineering: A Practitioner's Approach*

by Pressman, Roger S.
The C Programming Language
by Kernighan, Brian and Ritchie, Dennis
Computers: 68000s
Vax 750 (Unix)

Introduction to Operating Systems 262-537 B P X Y
Textbooks: *Operating System Elements: A User Perspective*
by Calingaert, Peter
Computers: 68000 based system
Vax 750

University of Wyoming College of Arts and Sciences
Computer Science Department
Program in Computer Science
Laramie, WY, 82071, United States

Degrees: BA, BS, MS

Contact: Dr. Petrick, Stanley
(307) 766-5190

Update: October 1987

Courses: **Software Engineering** COSC 699 B P X Y 1
Textbooks: *Software Engineering*
by Sommerville, Ian
Computers: CDC Cyber 840
PC
Vax 11/785

Utah State University College of Science
Department of Computer Science
Logan, UT, 84322-4205, United States

Degrees: BS, MS

Contact: Prof. Jones, Greg
Associate Professor
(801) 750-3267

Update: October 1987

Courses: **Software Development/Implementation** CS 655-6 G P E O 8
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
Compilers: TeleSoft Ada
Computers: HP 9000
Macintosh
PC clones
Vax 8500
Languages: Ada

Software Systems CS 456 U P R O 7
Textbooks: *Software Engineering Methodology*
by Turner, Ray
Compilers: VMS
Computers: Vax 8500
Languages: Pascal

Vanderbilt University School of Engineering
Department of Computer Science
Nashville, TN, 37235, United States

Degrees: BA, BS, MS, ME, PHD

Contact: Dr. Schach, Stephen R.
Director of Graduate Studies
(615) 322-2924

Update: May 1987

Courses: **Software Engineering** CS352 G P E Y 2
Textbooks: *Ada, an Advanced Introduction*
by Gehani, Narain
Compilers: Vax Ada
Computers: Vax 11/785
Languages: Ada

Villanova University (Entry 1) College of Liberal Arts and Sciences
Mathematical Sciences Department
Villanova, PA, 19085, United States

Degrees: BS CS, BS M, MS CS, MA M

Contact: Dr. Joyce, Daniel
(215) 645-7344

Update: June 1987

Courses: **Software Engineering** CSC 4700 U P E Y 1
Textbooks: *Software Engineering Concepts*
by Fairley, Richard E.
The Mythical Man-Month: Essays on Software Engineering
by Brooks, Frederick Phillips
Compilers: Pascal
Computers: Vax network
Languages: Pascal

Software Engineering CSC 8540 G N E T 1
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.

Virginia Commonwealth University School of Arts and Sciences
Department of Mathematical Sciences
Program in Computer Science
Richmond, VA, 23284, United States

Degrees: BA, BS, MA, MS

Contact: Dr. Haver, William E.
Department Chairman
(804) 257-1301

Update: None

Courses: **Software Engineering** 591 B P E D
Textbooks: *Software Engineering*

by Sommerville, Ian
Computers: IBM 3170
IBM PC
IBM PC/AT
Pyramid mini-computer network

Washington State University College of Sciences and Arts
Department of Computer Science
Pullman, WA, 99164, United States

Degrees: BS, MS, PHD

Contact: Dr. Benson, David B.
Professor
(509) 335-2706

Update: None

Courses: **Software Development** CptS 422 U P E Y
Textbooks: *C: An Advanced Introduction*
by Gehani, Narain
Introducing the UNIX System
by McGilton, Henry and Morgan, Rachel
Software Engineering: A Practitioner's Approach
by Pressman, Roger S.
The Mythical Man-Month: Essays on Software Engineering
by Brooks, Frederick Phillips
The UNIX C Shell Field Guide
by Anderson, Gail and Anderson, Paul
Computers: Unix systems

Software Development Lab CptS 423 U P E Y
Textbooks: *C by Dissection: The Essentials of C Programming*
by Kelley, Al and Pohl, Ira
Introducing the UNIX System
by McGilton, Henry and Morgan, Rachel
Computers: Unix systems

Verification CptS 522 G P E Y
Textbooks: *The Science of Programming*
by Gries, David

Washington University Sever Institute of Technology
Department of Computer Science
St. Louis, MO, 63130, United States

Degrees: BS, MS, SCD

Contact: Dr. Roman, Gruia-Catalin
Associate Professor
(314) 889-6190

Update: May 1987

Courses: **Programming Systems and Language** CS 455 B P R O 10
Textbooks: *Formal Specification of Programming Languages*
by Pagan
Programming Languages, Design and Implementation
by Pratt

Compilers: Franz Lisp
Prolog
TeleSoft Ada
Computers: Vax 780
Languages: Ada
Lisp
Prolog

Software Engineering Workshop CS 456 B P R O 10
Textbooks: *Software Engineering with Modula-2 and Ada*
by Wiener, Richard and Sincovec, Richard
Compilers: TeleSoft Ada
Computers: Vax 11/750
Languages: Ada

Distributed System Design CS 576S G P E X 1
Textbooks: *Coordinated Computing: Tools and Techniques for Distributed Software*
by Filman, Robert E. and Friedman, Daniel P.

Modular Programming CS 545S G P E B 4
Textbooks: *Programming in Ada*
by Barnes, John Gilbert Presslie
Programming in Modula-2
by Wirth, Niklaus
Compilers: DECSRC Modula-24
TeleSoft Ada (V1.5)
Computers: Vax 780
Languages: Ada
Modula-2
Smalltalk

Advanced Software Engineering CS 656S G N E O 7

Research Seminar on Distributed System Design CS 673.1 - CS 673.6 G N E T 1

Wayne State University College of Engineering
Department of Electrical and Computer Engineering
Detroit, MI, 48202, United States

Degrees: BS, MS, PHD

Contact: Prof. Meisel, Jerome
Acting Chair
(313) 577-3920

Update: None

Courses: **Engineering Software Design** ECE 660 G P X Y
Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
Computers: Amdhal 470 V8
IBM 3081
IBM 4381
MTS (Michigan Terminal System)

West Virginia College of Graduate Studies (WVCOGS) Engineering and Science Division
Information Systems
Institute, WV, 25112, United States

Degrees: MS

Contact: Prof. Hutton, Robert N.
Associate Professor
(304) 768-9711 x456

Update: May 1987

Courses: **Systems Analysis Techniques** IS 605 G N R Y 4
Textbooks: *Structured Analysis Methods for Computer Information Systems* by Teague, Lavette C. and Pidgeon, Christopher

System Design IS 610 G P R Y 5
Textbooks: *Business Computer Systems Design* by Dolan
Computers: VM/CMS

Software Engineering Principles IS 625 G P E Y 1
Textbooks: *Software Engineering with Ada* by Booch, Grady
Compilers: Vax Ada
Computers: Vax
Languages: Ada

West Virginia University College of Arts and Sciences
Department of Statistics and Computer Science
Program in Computer Science
Morgantown, WV, 26506, United States

Degrees: BS, MS

Contact: Prof. Butcher, Donald F.
Professor and Chairman
(304) 293-3607

Update: June 1987

Courses: **Software Engineering** CS 275 U P E Y 1
Textbooks: *Software Engineering* by Sommerville, Ian
Languages: Ada

Ada with Software Engineering CS 291/391 B P E Y 2
Textbooks: *Software Engineering with Ada* by Booch, Grady
Compilers: Digital Ada
Computers: Vax 11/780 under VMS
Languages: Ada

Principles of Software Development CS 170 U P E Y 4
Compilers: PL/I optimizing compiler on Vax PL/I
Computers: IBM 3081
Vax 11/780
Languages: PL/I and System Utilities

Software Engineering in Data Communications CS 350 G P E Y 3

Compilers: ALSYS Ada
IBM PC Assembler
Lattice C
RT-11 Assembler
Vax Unix C

Computers: IBM PC/AT
IBM PC/XT
IBM PCs
PDP 11/23s
Vax 11/750

Languages: Ada
Assembly
C

Western Michigan University
Department of Computer Science
Program in Computer Science
Kalamazoo, MI, 49008, United States

Degrees: BS CS, MS CS

Contact: Prof. Nelson, J. Donald
Chairman
(616) 383-6151

Update: October 1987

Courses: **Software Systems Development** 544 B P B O 7

Textbooks: *Software Engineering: A Practitioner's Approach*
by Pressman, Roger S.
The Mythical Man-Month: Essays on Software Engineering
by Brooks, Frederick Phillips

Compilers: COBOL
Fortran
Pascal

Computers: DEC Tops system 10
MS DOS
Macintosh
Vax Unix
Vax VMS

Languages: COBOL
Fortran
Pascal

Wright State University
College of Science and Mathematics/College of Engineering and Computer Sci.
Department of Computer Science
Programs in Computer Science, Computer Eng., and Computer Science and Eng. (Ph.D.)
Dayton, OH, 45435, United States

Degrees: BA, BS, BS CE, MS, PHD

Contact: Prof. Carson, Howard V.
Assistant to the Chairer
(513) 873-2491

Update: None

Courses: **Software Engineering I** Software Engineering 760 G P E Y
Textbooks: *Classics in Software Engineering*
by Yourdon, Edward N.
Software Engineering with Ada
by Booch, Grady
Computers: DEC Vax 11/750 running VMS

Software Engineering II Software Engineering 761 G N E Y
Textbooks: *Writings of the Revolution: Selected Readings on Software Engineering*
by Yourdon, Edward N.
Computers: DEC Vax 11/750 running VMS

Real-Time Software Design Computer Engineering 431/631 B P R T
Textbooks: *Operating System Concepts*
by Peterson, James, and Silberschatz, Abraham
Computers: DEC PDP 11/44 running RSX-11M
LSI-11 microprocessor workstations

Data Structures and Software Design Computer Science 400/600 B P R T
Textbooks: *Fundamentals of Data Structures in Pascal*
by Horowitz, Ellis and Sahni, Sartaj
Computers: DEC Vax 11/750 running VMS

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This directory provides information about software engineering courses and software engineering degree programs that are available in the United States and Canada.

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