

SCHOOL OF ENGINEERING  
AND APPLIED SCIENCE

UNIVERSITY OF CALIFORNIA  
LOS ANGELES

COURSE PROPOSAL

TO: Office of Student Affairs  
6426 Boelter Hall

Date: January 12, 1999

FROM: D.S. Parker Computer Science  
(Proposer) Department

Course No. CS141 Title Basic Methods of Data Organization

New Course \_\_\_\_\_ Revision \_\_\_\_\_ Deletion X

Prerequisites \_\_\_\_\_

CATALOG DESCRIPTION (Limit 40 words):

141. Basic Methods of Data Organization. Lecture, four hours; laboratory, two hours; outside study, six hours. Prerequisite: course 32 or consent of instructor. Fundamental techniques for organizing and manipulating data, stressing relationships to performance, time/storage trade-offs. Sequential and linked storage allocation for linear lists, multilinked structures. Trees: implementation, traversals, mathematical properties. Graphs and networks: memory representation, algorithms. Dynamic storage allocation. External storage devices. Database concepts and architectures. Topics include sorting-searching, algorithmic analysis, graph theory, concepts underlying file management.

JUSTIFICATION FOR PROPOSAL:

This course been superseded by CS180 (Algorithms and Complexity).

Revised 1/12/98

Does this modification affect major or minor field program?  
 Yes \_\_\_\_\_ No

Submit major field program sheets with handwritten correction.

This course is recommended to satisfy an elective constraint as indicated below:

Suggested Units (please circle)	Constraints				
	Units Approved by UPC				
___ Design_____ 0 1 2 3 4	0	1	2	3	4
___ Engineering Science_ 0 1 2 3 4	0	1	2	3	4
___ Laboratory_____ 0 1 2 3 4	0	1	2	3	4
___ Engineering and Science in Society	___DO_NOT_FILL_IN___				
___ Mathematics - Upper division					

RECOMMENDED Signatures(s):

\_\_\_\_\_  
 DEPARTMENT CHAIRMAN PROPOSER DATE

\_\_\_\_\_  
 ACADEMIC POLICY COMMITTEE (CSD) PROPOSER DATE  
 CHAIRMAN

\_\_\_\_\_ Signature: \_\_\_\_\_  
 EXECUTIVE COMMITTEE (SEAS) INSTRUCTOR IN CHARGE DATE  
 CHAIRMAN