

- ET 444. Computer Architecture (s) 3 cr. (2+3P)
The design, development, implementation, documentation and formal demonstration of a microprocessor-based application to solve an engineering problem. Emphasis on microprocessor architectural concepts and software interfacing. A student project is required. Prerequisites: E-T 344, E T 398, and senior standing in E T.
- ET 454. Advanced Construction Technology 3 cr.
Contractor design and construction methods concerning formwork, special foundations, shoring, excavations, pilings, steel erection, and various material handling components. Prerequisite: E T 354 and E T 355.
- ET 455. Cost Estimating and Scheduling 3 cr.
Methods and techniques in construction estimating including final bid preparation, construction planning and scheduling using various network methods and other techniques. Prerequisite: junior or senior standing in E T.
- ET 456. Analysis of Physical Security Systems 3 cr.
The design, analysis and implementation of security systems and subsystems including threat detection and response, information and communications security, and physical protection. Prerequisite: junior standing.
- ET 457. Introduction to Information Security 3 cr.
Internet vulnerabilities including the Internet worm, buffer overflows, denial of service, hacking toolkits. Social engineering of information, integration of PC applications, JAVA vulnerabilities, cookies, credit card fraud, and system administration. Networking topologies and configurations. Prerequisites: E T 377 or consent of instructor.
- ET 458. Database Design and Applications 3 cr.
Structured Query Language is introduced as the basis for the development of relational database management systems. The course includes database design, administration, security issues, and using the systems developed to access data in various computer and communication environments. Prerequisite: senior standing in ET or consent of instructor.
- ET 462. Operating Systems and Interfacing 3 cr.
Concepts relating to operating systems applications and interfacing with an introduction to systems administration. Prerequisite: E T 362 and junior standing.
- ET 463. Computer Systems Administration 3 cr.
A continuation of topics in computer systems administration from E T 462. Prerequisite: E T 462.
- ET 468. Applications of Electronic Devices 3 cr. (2+3P)
Study of the applications of analog and digital devices as they are commonly used in data acquisition systems. Includes basic construction and diagnostic skills. Prerequisite: senior or graduate standing.
- ET 469. Data Acquisition and Computer Interfacing 3 cr. (2+3P)
Survey of computers and associated hardware available to the research community. Includes practical digital signal processing methods and an overview of transducers. Prerequisites: senior or graduate standing and E T 468 or consent of instructor.
- ET 470. Data Analysis and Acquisition 3 cr. (2+3P)
The use of hardware and software to establish a unified and efficient data collection and analysis system. Prerequisites: senior or graduate standing and E T 469 or consent of instructor.
- ET 477. Computer Networking II 3 cr. (2+2P)
Advanced concepts in computer network design and applications including managing the campus network, virtual LANs (VLAN), network security, wireless networks, high-speed optical networks, voice over IP, and Linux networking. Prerequisite: E T 377.
- ET 479. Developing and Managing Educational Networks 3 cr.
For educators who plan to manage technology resources in schools. Focuses on operating systems, network capabilities and management, connections and transfer of files between different computer platforms, and managing peripheral devices. Prerequisite: EDUC 568 or consent of instructor. Same as EDLT 529.
- ET 480. Design and Problem Solving in Engineering and Technology 3 cr.
Development of problem-solving and critical-thinking abilities through design, analysis, and implementation of projects in selected areas of technology and engineering. Intended for mathematics, science, and technology educators. Prerequisite: consent of instructor. May be repeated for a maximum of 6 credits.
- ET 482. Concepts in Computer Integrated Manufacturing 3 cr. (2+2P)
Current manufacturing concepts regarding the data, hardware, and software necessary for a computer integrated manufacturing system. Prerequisites: senior standing and consent of instructor. Same as I E 482 and M E 482.
- ET 490. Selected Topics 1-3 cr.
Selected topics in engineering technology and related areas. Prerequisite: consent of instructor.
- **FCS—Family and Child Science**
Department of Family and Consumer Sciences
- FCS 181. Interpersonal Skills in Intimate Relationships 3 cr.
Developing social skills within friendships, dating relationships, marriage, parenting, and families.
- FCS 200. Special Topics 1-4 cr.
Specific subjects and credits announced in the *Schedule of Classes*. Maximum of 4 credits per semester and a grand total of 9 credits.
- FCS 300. Special Topics 1-4 cr.
Specific subjects and credits announced in the *Schedule of Classes*. Maximum of 4 credits per semester and a grand total of 9 credits.
- FCS 380. Family Dynamics 3 cr.
The dynamics of family relationships and changes influencing contemporary families. Interaction between the family and other social systems will be examined. Open to nonmajors.
- FCS 381. Middle Childhood Development in the Family 3 cr.
Research and theory relevant to the physical, mental, social, and emotional development of the child from age five to age twelve. Attitudes, knowledge, and skills related to working with school-age children in the family system. Observation in a variety of settings may be required.
- FCS 383. Parenting and Child Guidance 3 cr.
Theories, principles, and skills essential for parents and professionals in guiding children within the family system. Problem prevention techniques are stressed. Prerequisite: either PSY 201G, SOC 101G or C EP 110G or consent of instructor.
- FCS 424. Field Experience: Issues and Ethics 2-4 cr.
Supervised work experience in community agencies providing services to family systems. Discussion of professional issues and ethical dilemmas. A total of 8 credits must be taken. Prerequisites: FCS 380 or equivalent, junior standing, and an overall GPA of at least 2.5 or consent of instructor. Restricted to majors.
- FCS 446. Adolescent Development and the Family 3 cr.
Research and theory relevant to the physical, mental, social, and emotional development of the child from age 12 to age 18. Attitudes, knowledge, and skills related to working with adolescents in the family system. Observation in a variety of settings may be required. Prerequisites: either 6 credits of social science or consent of instructor.
- FCS 447. Infancy and Early Childhood in the Family 3 cr.
Research and theory relevant to prenatal development and the physical, mental, and socio-emotional development of the child from birth to age five. Attitudes, knowledge, and skills needed for working with young children and their families. Prerequisite: either 6 credits of social science or consent of instructor. Open to nonmajors.
- FCS 448. The Aging Family 3 cr.
Research and theory related to the physical, mental, social, and emotional development of older adults. Attitudes, knowledge, and skills related to working with older adults in the family system, including normative, and nonnormative transitions. Prerequisites: either 6 credits of social science and FCS 380, or consent of instructor.
- FCS 449G. Family Ethnicities and Subcultures 3 cr.
Comparative study of American family subsystems with respect to selected social, economic, and cultural backgrounds. Interaction of these subsystems in American society. Differentiated assignments for graduate students.
- FCS 462. Family Communications 3 cr.
Same as COMM 462, W S 462.
- FCS 492. Special Problems 1-4 cr.
Individual research in a selected subject area of family and consumer sciences. Maximum of 4 credits per semester and a total of 6 credits.
- **FCSC—Family and Consumer Sciences**
Department of Family and Consumer Sciences
- FCSC 111. Freshmen Orientation 1 cr.
Orientation to university life, including available resources and methods to promote success at NMSU. General exposure to fields in agriculture and home economics. Open to all freshmen and transfer students. Graded S/U.