In October 2011, the Department of Education awarded Sul Ross State University a grant of $4.3 million to increase attainment of Science, Technology, Engineering & Math degrees through the Computer Science Initiative (CSI). CSI students will use state-of-the-art technology in new PC and Mac laboratories plus benefit from dedicated, trained and knowledgeable faculty who are vested in the one-on-one teacher/student relationship that is the specialty of Sul Ross State University.

A Revised CS Degree and Four New CS Concentrations

The Bachelor of Science Degree in Computer Science

Learn programming languages and skills to build software applications and solutions to business programs. The program’s core languages, C++ and Java, are becoming increasingly important in education, government, and industry.

Gaming Design and Technology

Create animations, games and applications for Apple, PC and Android platforms. Courses in Gaming Design and Technology Concentration begin Fall 2012.

Information Security Technology

Set up, manage, and audit security technologies; Courses in Information Security Technology begin Fall 2014.

Communication Design and Technology

Design theory and history to provide the technical knowledge and training needed for professional design work for publication media, corporate design, and interactive electronic media. Courses in the Communication Design and Technology Concentration begin Fall 2012.

Criminal Justice Technology

A combination of the knowledge base from the Information Security Technology concentration and course work from the current Criminal Justice degree program. Courses in the Criminal Justice Technology program begin Fall 2015.
The SRSU Academic Center for Excellence

You know you can do it. You have the determination and you know what you want. For some of us, math concepts are immediately grasped, simple and even fun. For most of us, math requires study and persistence before the Aha! Moment arrives. The Academic Center for Excellence (ACE) staff and student tutors are here to help. ACE offers developmental education courses in reading, writing and most importantly for CS majors, mathematics. There are even workshops in study skills, time management, and note taking. The CSI and ACE staffs have teamed up to offer PLATO online math diagnostic skills assessments. Find out where you are and what you need to succeed; then begin training at ACE to fill in your learning gaps. The PLATO instruction is designed to appeal to different learners in the varied ways in which we all come to master a subject. Using PLATO, you are actively engaged and need to frequently interact with the content so that you really learn...not just watch a monitor and repeat answers. And you learn at the pace of your choosing. Whether you’re recently enrolled in college or a working adult who needs online courses that fit into a busy schedule, ACE has the tech-savvy training you can use today. The Academic Center for Excellence is located on the 2nd floor of Ferguson Hall. Contact Kathy Stein at (432) 837-8408 or kstein@sulross.edu for more information.

Funding for the Computer Science Initiative is provided by the U.S. Department of Education through a Title V Hispanic Serving Institutions—Science, Technology, Engineering and Math grant.

iPad Loaner Program

A key component of the Computer Science degree and the four concentrations is the accessibility of the technology used in the classroom and lab. All qualified computer science majors will be loaned an iPad for use during their studies. The iPads may be used for writing and collaborative assignments in Gaming and Screenwriting, creating instant sketches for projects in Digital Imaging, and student-professor in-class interaction in computer technology courses. To qualify for the loaner program, a student must have completed all developmental course work, all prerequisite course work, and have a minimum of 2.0 grade point average. Contact the Computer Science Initiative staff for more information:

- Paula Wallace  
  (432) 837-8506  
  pwallace@sulross.edu
- Jose Cabrera Zuniga  
  (432) 837-8509  
  jcabrerazuniga@sulross.edu  
  Rebecca Hart  
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Professor of Gaming Technology and Art: Avram Dumitrescu

Professor Dumitrescu will be joining the SRSU faculty this summer to teach some of the creative classes associated with gaming and communication.

Dumitrescu moved with his wife to Far West Texas several years ago and, since arriving, has taught a number of design classes as an adjunct professor at the university. “I’m really thrilled to be involved in this new degree, especially as it touches on many creative disciplines that I’m interested in.”

Originally from Ireland, Dumitrescu has worked as a freelance illustrator and fine artist, creating art for many magazines, galleries, and other clients. Over the past number of months he has been developing an iOS (iPad Operating System) game with a programmer in New Zealand.

This fall he will be teaching Introduction to the Visual Arts, 2D Design, and next year will offer classes in Animation and Game Design.
Computer Science Initiative Faculty and Staff Attend Game Developers Conference

Computer Science Initiative faculty and staff members gained extensive knowledge that will be put to use developing courses for the new Gaming Design and Technology degree at SRSU. Gaming industry leaders conducted seminars in game creation all the way from the technical knowledge required for programming to the artistic aspects of animation and script writing. SRSU was represented by faculty from three departments: Business Administration (Ms. Mazie Will); Math & Computer Science (Dr. David Martin and Dr. Rafael Azuaje); and Fine Arts (Dr. Esther Rumsey, Mr. Greg Schwab, Ms. Dona Roman, Ms. Carol Fairlie, Mr. Avram Dumitrescu, and Dr. Travis Clark) in an effort to create curriculum that creates a bridge between the analytical and creative aspects of game development. Ms. Paula Wallace, CSI Project Director, said of the GDC, “It allowed SRSU attendees to explore experimental and inventive educational approaches to gaming technology.”

Lobo Recruiting and the Computer Science Initiative Getting the Word Out

Sul Ross State University recruiters organized events in Lubbock (May 14) and El Paso (May 16 & 17) to get the word out to high school teachers, students and parents about the CSI.

Dr. Esther Rumsey, who will be teaching core CSI curriculum in the Spring 2013 semester, heard one question many times, “Where do we sign up?” Evidently, the enthusiasm was widespread as a student literally turned a backflip when Avram Dumitrescu, Professor of Gaming Technology and Art, discussed the Game Design Technology concentration. There is a lot to be excited about. Computer Science is forecasted to be one of the high-growth fields in the next decade and as Dona Roman (see more information on page 4) said, “(the CSI program) will certainly set SRSU apart from many other programs around the state and region.”

The CSI staff is grateful to Kelly Dyal, SRSU Coordinator of Recruiting, and her recruiters Kristi Fonseca-Williams, Joyce Sanchez, and Violet Urquidez for putting these great events together.

So….where do you apply? It’s easy and we’re here to help. Contact the Center for Enrollment Services at http://www.sulross.edu/pages/3018.asp. Call (432) 837-8050 and speak to an enrollment specialist and get the facts on how to apply or transfer to SRSU, file for financial aid, see what’s available for campus housing, and many other student services. Best of all, come see us! The recruiters are available for campus tours and the CSI faculty and staff look forward to any opportunity to tell you about the Computer Science Initiative.
Motion Capture at Sul Ross

Dona Roman, Director and Professor of Theater at SRSU, demonstrated Motion Capture (MoCap) technology to prospective students on a recent recruiting trip. MoCap is used in game development to capture actors’ movements, facial and vocal expressions. Professor Roman will be teaching MoCap in CSAT 2306, Basic Television, this fall. This course will cover camera and lighting techniques for digital video production and visual storytelling using innovative technology to provide hands-on experience in developing high-definition cinematography. MoCap is just one example of computer technology that will be available at SRSU. Check out the SRSU Lobo Den for more information about registration and SRSU enrollment at http://www.sulross.edu/pages/3490.asp

The Computer Science Initiative faculty members are:

Rafael Azuaje, Ph.D., Dept. of Math & Computer Science
Travis Clark, Ph.D., Dept. of Fine Arts & Communication
Avram Dumitrescu, MAA, Dept. of Fine Arts & Communication
Carol Fairlie, MFA, Dept. of Fine Arts & Communication
Kristofer Jorgenson, Ph.D., Dept. of Math & Computer Science

David Martin, Ph.D., Dept. of Math & Computer Science
Dona Roman, MFA, Dept. of Fine Arts & Communication
Esther Rumsey, Ph.D., Dept. of Fine Arts & Communication
Gregory Schwab, MFA, Dept. of Fine Arts & Communication
Mazie E. Will, MS, CPS/CAP, Dept. of Business Administration

Midland College
El Paso Community College
San Antonio College
Odessa College
Howard College

The Computer Science Initiative Articulation program at Sul Ross State University is designed for students who choose to take their core curriculum at one of these colleges and then transfer to SRSU to finish their degree in Alpine. The CSI staff is working to formulate agreements with these schools to make the transition as smooth as possible. Contact us for details about the CSI Articulation program.