Additional areas can be found online at parks.slu.edu/research.

- Transportation
- Tissue engineering
- Thermal-fluid sciences
- Structures and bridges
- Space systems
- Signal processing
- Sensors and systems
- Reparative medicine
- Neuro/outgrowth and injury
- Innovation and entrepreneurship
- Energy, sustainability and environmental
- Cardiovascular and assist devices
- Mechanical engineering
- Biomedical engineering
- Civil engineering
- Computer engineering
- Electrical engineering

M.S.:
The Master of Science degree requires a minimum of 30 credit hours beyond a bachelor's degree. For students pursuing the research option, six of the total credit hours must be in thesis research. For students pursuing the project option, three of the total credit hours must be devoted to carrying out a project. Up to 12 credit hours may be transfer credits. Each graduate student is expected to maintain a cumulative GPA of 3.0. A lower GPA may result in probationary status and/or dismissal from the program due to unsatisfactory academic performance. Lastly, all graduate students are required to enroll each semester until a degree is received.

Each master's student prepares a program of study that must be approved by their faculty advisor, the department chair and the graduate programs director for Parks College. This program of study is developed within the context of the student's background and career goals, allowing students to customize their graduate program to suit their professional goals.

Ph.D.:
The doctorate in engineering requires a total of 60 credit hours beyond a bachelor's degree with a minimum of 36 credit hours of coursework and a minimum of 12 credit hours of dissertation research. Of the 60 credit hours, only a limited number may be comprised of coursework at the 4000-level; all other course credits must be at the 5000 or 6000 level. Those students who earn a Master of Science degree may include the associated M.S. degree coursework credits — but not the thesis or project credits — in the 60 credit hours that are needed for the Ph.D. degree.

Research Areas:
The expert faculty of Parks College collaborate with graduate students in ground-breaking research in the following areas:
- Cardiovascular and assist devices
- Energy, sustainability and environmental
- Innovation and entrepreneurship
- Neuro/outgrowth and injury
- Reparative medicine
- Sensors and systems
- Signal processing
- Space systems
- Structures and bridges
- Thermal-fluid sciences
- Tissue engineering
- Transportation
- Water resources and hydraulics

Additional areas can be found online at parks.slu.edu/research.
PARKS COLLEGE OF ENGINEERING, AVIATION AND TECHNOLOGY

Engineering

FACULTY

Gary Bledsoe, Ph.D.: Orthopedic tissue engineering and biomechanics, trauma biomechanics
Larry Boyer, M.S.: Flight simulation, computer graphics
J. Chris Carroll, Ph.D.: Structural and material engineering
Natasha Case, Ph.D.: Musculoskeletal tissue engineering, biomechanics
Sridhar Condoor, Ph.D.: Design theory/methodology, technology entrepreneurship, sustainability
Amanda Cox, Ph.D., PE: Water resources and hydraulics
William Ebel, Ph.D.: Digital signal processing, sensors and sensor technologies
Yan Gai, Ph.D.: Function of auditory and other sensory systems, neurophysiology and neuroscience
Roobik Gharabaghi, Ph.D.: Thermal effects on semiconductor devices
Jenna Gorlewicz, Ph.D.: Electromechanical design, haptic and human-machine interfaces, modeling
Srikanth Gururajan, Ph.D.: Fault tolerant flight control, unmanned aerial vehicles (UAVs)
Andrew Hall, Ph.D.: Interventional cardiology and radiology, cardiac electrophysiology
Riyadh Hindi, Ph.D., PE: Structural mechanics and design, reinforced concrete
Sanjay Jayaram, Ph.D.: Space systems and components, small spacecraft design
Jail Kianfar, Ph.D.: Traffic and transportation safety and engineering
Armineh Khalili, M.S.: Digital systems, computer programming
Ray LaBeau, Ph.D.: Thermal-fluid sciences, planetary atmosphere, fluid dynamics
Ronaldo Luna, Ph.D., PE: Geotechnical instrumentation, geographic information systems
Jeff Ma, Ph.D.: Structural mechanics/design, computational solid mechanics, manufacturing
Huiliyar Mallikarjuna, Ph.D.: Modeling and analysis of electric machinery
Mark McQuilling, Ph.D.: Thermal-fluid sciences, experimental fluid mechanics
Kyle Mitchell, Ph.D.: Power computer modeling and design, aircraft flight monitoring
Habib Rahman, Ph.D.: Electromagnetic theory and applications and radar systems
K. Ravindra, Ph.D., PE: Thermal-fluid sciences, experimental fluid dynamics, design
Michelle, Sabik, Ph.D.: Biomedical engineering
Scott Sell, Ph.D.: Tissue engineering and regenerative medicine
Michael Swartwout, Ph.D.: Spacecraft design, mission operations, navigation
John Woolschlager, Ph.D.: Environmental sustainability
Grigoriy Yablonsky, Ph.D.: Heterogeneous catalysis, chemical mathematical modeling
Silviya Zustiak, Ph.D.: Hydrogel biomaterials and tissue engineering

DEGREES OFFERED

• Master of Science (M.S.) in Engineering
• Doctor of Philosophy (Ph.D.) in Engineering

COURSES AVAILABLE

• Online
• Nights
• Weekends
• Online

APPLICATION REQUIREMENTS

• Online application form and fee
• Official transcript(s) of all previous degrees
• Three letters of recommendation
• GRE scores
• CV
• Professional goal statement
• Personal Potential Index Scores (PPI)

FINANCIAL SUPPORT

Parks College offers graduate fellowship awards and assistantships each year. Assistantships provide tuition, stipend and health insurance. The deadline to apply is March 1 for consideration for the following fall semester.

More information can be found online at parks.slu.edu/grad-support. Information on other financial aid opportunities can be found by visiting the student financial aid office at finaid.slu.edu.

CONTACT INFORMATION

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