POLYTECHNIC COLLEGE

Administrative Officers

Name	Title
Chad Hargrave, PhD	Vice President & Chief Research Officer
Clayton Cottle	Assistant Vice President of Operations & Strategic Initiatives
Jonathan Thomas	Director of Strategic Partnerships & Technology Transfer
Stephen Mujeye, PhD	Director of Computer Information Systems & Security; Assistant Professor of Practice
Scott Meyer, PhD	Director of Paralegal Studies; Assistant Professor of Practice
Jody Czajkoski, JD	Director of Business Development

About Us

For 145 years, Sam Houston State University has championed student success, providing access to quality education, including first-generation students. Founded after World War II as the Josey School to support returning military members, the Polytechnic College continues SHSU's mission of workforce-aligned education. Today, it offers flexible, practical pathways to build valuable skills while keeping the option to pursue a four-year degree open.

Polytechnic certificates and applied associate degrees provide students with hands-on, practical experiences that translates directly into marketable skills and maximizes employment opportunities and career mobility.

Why SHSU Polytechnic?

In a rapidly evolving workforce, Sam Houston State University's Polytechnic College (https://sam.edu/) is here to equip you with the skills you need to succeed. Our industry-aligned programs offer practical, applied education that meets current industry demands.

At SamPoly (https://sam.edu/), we believe in the power of applied knowledge to transform lives and create lasting impact. Here, learning is hands-on, empowering and focused on preparing you to lead and thrive in your chosen field.

Polytechnic certificates and applied associate degrees provide students with hands-on, practical experiences that translates directly into marketable skills and maximizes employment opportunities and career mobility. Some course credit earned through SHSU Polytechnic certificates and applied associate degrees will apply towards four-year bachelor's degrees in a related academic discipline.

At SamPoly we believe collaboration is the key to unlocking innovation and shaping the workforce of tomorrow. By partnering with us, you can play a pivotal role in preparing students to meet the challenges of a dynamic and ever-evolving global economy. Together, we can bridge the gap between education and industry, creating opportunities that make a lasting impact.

Educational Partners

We collaborate with educational institutions to develop innovative pathways, such as dual-credit courses and shared resources, to empower students at every stage of their academic journey. By working together, we can expand access to quality education, foster student success and build a stronger community of learners.

Industry Partners

Our programs are designed with input from industry leaders to ensure graduates are equipped with the skills employers need. By partnering with us, you can help shape curriculum, provide internships or apprenticeships and connect with a pool of job-ready talent. Whether you're looking to upskill your existing workforce or hire skilled graduates, our collaboration can drive innovation and deliver measurable value for your business.

Career & Technical Programs

- Computer Information Systems and Security, Level I Certificate | AAS (https://catalog.shsu.edu/archives/2025-2026/computer-information-systems-and-security-level1certificate-aas/)
- Paralegal Studies, Level II Certificate | AAS (https://catalog.shsu.edu/archives/2025-2026/careerandtechnical/polytechniccollege/paralegal-studies-level2-certificate-aas/)
- Practical AI and Intelligent Automation, Level I Certificate (https://catalog.shsu.edu/archives/2025-2026/careerandtechnical/polytechniccollege/practical-ai-and-intelligent-automation-level1-certificate/)

Artificial Intelligence

ITAI 1370. AI Fundamentals & Platforms. 3 Hours.
Students acquire a foundational understanding of AI, its applications, and how to access and use AI platforms without requiring advanced technical knowledge.

ITAI 1371. AI Ethics and Society. 3 Hours.
Students are introduced to the ethical implications of AI technologies, including issues of bias, privacy, and social impacts of AI deployment.

ITAI 1372. AI in Industry. 3 Hours.
Students explore how AI is being applied across different industries and identify potential opportunities for AI integration.

ITAI 1373. Data Analysis & Visualization. 3 Hours.
Students learn the basics of data analysis and visualization, focusing on turning raw data into actionable insights accessible tools.

ITAI 1374. Automating Workflows. 3 Hours.
Students are introduced to the fundamentals of Robotic Process Automation (RPA) and learn how to automate repetitive tasks using UiPath.

ITAI 1375. AI-Powered Data Insights. 3 Hours.
Students generate AI-driven insights from data using Microsoft Power Bi.

ITAI 2370. AI for Customer Service. 3 Hours.

ITAI 2371. Natural Language Processing. 3 Hours.
Students explore Natural Language Processing (NLP) and use IBM Watson to analyze and process text data.

ITAI 2372. Image and Text Analysis. 3 Hours.
Students employ Google Cloud AI's tools for analyzing images and text, enabling students to leverage advanced AI capabilities for media analysis.

ITAI 2373. Predictive Analytics. 3 Hours.
Students implement predictive analytics models using Microsoft Azure AI, enabling students to forecast outcomes based on data.

ITAI 2374. Automating Customer Insights. 3 Hours.
Students use IBM Watson Discovery to automate the extraction of insights from customer data, enhancing data-driven decision-making processes.

ITAI 2375. Capstone Project. 3 Hours.
Students apply the knowledge and skills acquired throughout the course to solve a real-world problem using AI technologies.

Computer Maintenance Technician

CPMT 1305. IT Essentials 1: PC Hardware and Software. 3 Hours.
Provides comprehensive overview of computer hardware and software and an introduction to advanced concepts addressed by Cisco certification. Topics may adapt to changes in industry practices.

Data Processing

ITSC 1305. Introduction to PC Operating Systems. 3 Hours.
Introduction to personal computer operating systems including installation, configuration, file management, memory and storage management, control of peripheral devices, and use of utilities.

ITSC 1316. Linux Installation and Configuration. 3 Hours.
Introduction to Linux operating system. Includes Linux installation, basic administration, utilities and commands, upgrading, networking, security, and application installation. Emphasizes hands-on setup, administration, and management of Linux.

ITSC 1342. Shell Programming. 3 Hours.
Reading, writing, and debugging shell scripts. Development of scripts to automate frequently executed sequences of commands. Covers conditional logic, user interaction, loops, and menus to enhance the productivity and effectiveness of the user. Intended for programmers who are familiar with operating environments and reading and writing various shell scripts.

Information Science

ITNW 1309. Fundamentals of Cloud Computing. 3 Hours.
Introduction to cloud computing from a business and technical perspective, including cloud concepts, services, architecture, system integration, connectivity, data center migration, administration, security, compliance and technical support. Coverage includes preparation for industry certifications. Topics may adapt to changes in industry practices.

ITNW 1325. Fundamentals of Networking Technologies. 3 Hours.
Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software.

Information Security

ITSY 1300. Fundamentals of Information Security. 3 Hours.
An introduction to information security including vocabulary and terminology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and countermeasures are addressed. The importance of appropriate planning, policies and controls is also discussed.

ITSY 1342. Information Technology Security. 3 Hours.
Instruction in security for network computer hardware, software, virtualization, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses. Topics may adapt to changes in industry practices.

ITSY 2300. Operating System Security. 3 Hours.
Safeguard operating systems by demonstrating support skills and designing and implementing security processes. Identify security threats and monitor security implementations. Use best practices to configure operating systems to industry security standards.

ITSY 2301. Firewalls and Network Security. 3 Hours.
Identify elements of secure network design that may include segmentation, Firewall implementation or a combination thereof to mitigate various types of security threats and attacks. Use Best Practices to design, implement, monitor and manage a network security plan. Examine security incident postmortem reporting and ongoing network security activities.

ITSY 2330. Intrusion Detection. 3 Hours.
Computer information systems security monitoring, intrusion detection, and crisis management. Includes alarm management, signature configuration, sensor configuration, and troubleshooting components. Emphasizes identifying, resolving, and documenting network crises and activating the response team.

ITSY 2341. Security Management Practices. 3 Hours.
In-depth coverage of security management practices, including asset evaluation and risk management; cyber law and ethics issues; policies and procedures; business recovery and business continuity planning; network security design; and developing and maintaining a security plan.

ITSY 2342. Incident Response & Handling. 3 Hours.
In-depth coverage of incident response and incident handling, including identifying sources of attacks and security breaches; analyzing security logs; recovering the system to normal; performing postmortem analysis; and implementing and modifying security measures.

ITSY 2345. Network Defense & Countermeasu. 3 Hours.
This is a practical application and comprehensive course that includes the planning, design, and construction of defenses for a complex network that will sustain an attack, document events, and mitigate the effects of the attack.

Legal Assistant/Paralegal

LGLA 1303. Legal Research. 3 Hours.
Presents legal research techniques emphasizing the paralegal's role.

LGLA 1305. Legal Writing. 3 Hours.
Fundamentals of legal writing techniques including case and fact analysis, citation formats, and legal writing styles emphasizing the paralegal's role in legal writing.

LGLA 1311. Introduction to Law. 3 Hours.
Presents legal terminology relating to substantive areas of law and the federal and state judicial systems. Emphasizes the paralegal's role in the legal system.

LGLA 1313. Introduction to Paralegal Studies. 3 Hours.
An overview of the paralegal profession including, professional regulation, trends and issues, ethical obligations, and the paralegal's role in the delivery of legal services.

LGLA 1317. Law Office Technology. 3 Hours.
Computer technology and software applications within the law office emphasizing the paralegal's role in the use of law office technology.

LGLA 1345. Civil Litigation. 3 Hours.
Presents fundamental concepts and procedures of civil litigation including pretrial, trial, and post-trial phases of litigation and emphasizes paralegal's role in civil litigation.

LGLA 1351. Contracts. 3 Hours.
Presents fundamental concepts of contract law including formation, performance, and enforcement of contracts under the common law and the Uniform Commercial Code with emphasis on the paralegal's role in contract law.

LGLA 1355. Family Law. 3 Hours.
Fundamental concepts of family law including formal and informal marriages, divorce, annulment, marital property, and the parent-child relationship with emphasis on the paralegal's role in family law.

LGLA 1380. Cooperative Education - Legal Assistant/Paralegal. 3 Hours.
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

LGLA 2305. Interviewing & Investigating. 3 Hours.
A study of techniques used to locate, gather, document, and manage information with emphasis on developing interview and investigative skills, and the paralegal's role in interviewing and investigating legal matters.

LGLA 2307. Law Office Management. 3 Hours.
Fundamentals of principles and structure of management, administration, and substantive systems in the law office including law practice technology as applied to paralegals.

LGLA 2313. Criminal Law and Procedure. 3 Hours.
Fundamental concepts of criminal law and procedure from arrest to final disposition including principles of federal and state law emphasizing the role of the paralegal in the criminal justice system.

LGLA 2331. Advanced Legal Research & Writing. 3 Hours.
Builds on previous legal research and writing courses and covers standard and electronic research techniques and preparation of complex legal documents with emphasis on the paralegal's role.

LGLA 2333. Advanced Legal Document Preparation. 3 Hours.
Use of office technology skills in preparation of legal documents by paralegals based on hypothetical situations drawn from various areas of law.

LGLA 2335. Advanced Civil Litigation. 3 Hours.
Implementation of advanced civil litigation techniques with emphasis on the paralegal's role. Builds upon skills acquired in prior civil litigation courses.

LGLA 2337. Mediation. 3 Hours.
Fundamental concepts of mediation and alternative dispute resolution emphasizing the paralegal's role assisting in the mediation process.

LGLA 2339. Certified Paralegal Exam Review. 3 Hours.
A review of the mandatory and optional topics covered in the Certified Paralegal Examination administered by the National Association of Legal Assistants.

LGLA 2341. Evidence. 3 Hours.
This course presents evidentiary concepts including gathering evidence, identifying evidentiary arguments, preparing evidence for trial, emphasizing the paralegal's role.

LGLA 2381. Cooperative Ed II- Paralegal Assistant. 3 Hours.
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component.

Programming

ITSE 1359. Introduction to Scripting Languages. 3 Hours.
Introduction to scripting languages including basic data types, control structures, regular expressions, input/output, and textual analysis. Topics may adapt to changes in industry practices.