Information Systems (Reynolda Campus)

Information Systems supports University instruction, research, and administrative needs through computing and telecommunications services. The campus computer network provides wired and wireless high-speed connectivity in all campus buildings as well as outdoor wireless coverage in select locations such as Hearn and Manchester Plazas.

All faculty, staff, and students on the Reynolda Campus are given a network login ID; the login ID is maintained as long as they are enrolled or employed. This account provides faculty, staff, and students with access to networked computer resources such as electronic mail, client-server software packages, various courseware applications, and administrative services. All new faculty and staff must enable Google 2-Step Verification within 30 days of claiming their WFU Google Mail account. All new students must enable Google 2-Step Verification within 90 days of claiming their WFU Google Mail account.

All undergraduate students are required to have a laptop with minimum configuration requirements to be able to handle all academic software. Students have the choice to bring their own device from home or purchase a laptop through the WakeWare program. WakeWare laptops are specially selected Apple and Dell models at educational prices, bundled with four years of warranty. Visit the WakeWare website at wakeware.wfu.edu for more information about purchasing, prices, support, and Technology Grants. All students are able to download academic software at software@WFU to their personally-owned computer. Visit software.wfu.edu to view software available and downloading instructions.

Information Systems maintains an extensive array of online resources that support University admissions, student registration, grade processing, payroll administration, finance and accounting services, and many other administrative and academic applications. In addition, Workday and the Wake Forest Information Network (WIN) provide the University community with features such as faculty, staff, and student directories; online class registration; electronic access to view payroll and tax information; vehicle registration, and more.

As of 2018, faculty, staff, and students have unlimited access and full-time support using the One Button Studio, a fully automated video production facility, located in Z. Smith Reynolds Library behind the IS Service Desk. The focus of the studio will be multimodal assignment support for students, but everyone is welcome. Support is also offered for faculty interested in designing technology enhanced projects or research. Wake Forest also established a student run Makerspace, named the WakerSpace. The space allows faculty, students, and staff to not only build physical projects using technology such as 3D printers, laser cutters, and solder stations, but also to learn skills such as podcasting, knitting, sewing, and woodworking through workshop partnerships with Facilities, Information Systems, and other resources across campus. By offering both academic and non-academic programs, the WakerSpace will serve a broad range of interests across campus.

Students also have access to computing resources outside the University. The University is a member of the Inter-University Consortium for Political and Social Research (ICPSR), located at the University of Michigan. Membership in ICPSR provides faculty and students with access to a large library of data files, including public opinion surveys, cross-cultural data, financial data, and complete census data. The University is also a member of EDUCAUSE, a national consortium of colleges and universities concerned with computing issues.

The University’s computing resources serve both academic and business needs. Wake Forest’s network infrastructure includes a ten gigabit per second Ethernet backbone, a mixture of 100 Megabit and 1 Gigabit per second switched connectivity to the desktop, and pervasive wireless connectivity in all campus buildings and select outdoor locations. Linux and Windows-based servers provide for administrative computing needs and services. A mix of Linux systems and Windows-based systems provide for communication and collaboration tools, Student Information System (SIS), website hosting, various research needs, and file and print services. A Linux supercomputing cluster provides supercomputing services for math, computer science, physics, and other departments. These systems are available to students, faculty, and staff 24 hours a day through the Wake Forest University network.

Programming languages available on the various academic computing systems include C, C++, Java, Perl, Python, Tcl/TK, Fortran77 and Objective C/Swift for iPad/iTouch programming. Students are exposed to a variety of operating systems through virtualization. Students, faculty, and staff have access to a large variety of instructional, classroom, and research resources through the campus network including the online catalog, databases, and electronic journals provided by the Z. Smith Reynolds Library.

Many departments on campus have their own computing resources in addition to those available through the Information Systems Department. Information Systems has a digital media lab for WFU faculty, staff, and student use when not being used during scheduled classes. It is open during the operating hours of the Information Systems Service Desk. The lab is equipped with 16 iMac computers that are loaded with software packages for multimedia editing, including the Adobe Creative Suite and SketchUp. Please contact the Information Systems Service Desk at help.wfu.edu with questions or for support during normal business hours. In addition to the tools provided by Wake Forest, the Department of Mathematics and Statistics has a server made available to students that may need more computational power to run programs such as Maple, Mathematica, MatLab, SAS, SPSS and a full suite of GNU compiler tools.

Through the use of operating system virtualization, the Department of Computer Science is able to offer a unique set of software tools that allow students to experience the nuances of various operating systems. Depending on the class, students may find themselves working on one of the many varieties of UNIX that are available in today's marketplace. These may include Ubuntu, Debian, and Red Hat Linux. Students also have access to various mobile platforms including the iPad, iPhone and Android platform. In addition students have access to 16 GPU servers (Graphics Processing Units) utilized in classes teaching CUDA stream programming. The Department of Computer Science also has a MakerBot 3D printer and multiple Raspberry Pi computers, tablets, sensors, and Roomba iCreate robots, to name a few, all for students to use and explore in various “STEM” classes.
Students and faculty have access to the Wake Forest DEAC Cluster, a high performance Linux cluster with 108 nodes with 3700+ processor cores with 20TB of RAM, 10G/usNIC connectivity, 180TB of research storage, and unlimited cloud archive. The Wake Forest DEAC cluster currently offers support to 13 departments with a wide variety of commercial and scientific software as well as open source middleware necessary to effectively and efficiently utilize the high performance computing cluster. Many campus wide licensed software packages are available to faculty, staff, and students are available on the cluster, such as: Matlab R2017a, Maple 18, and Mathematica 11.1. Currently, researchers on the cluster have dedicated access to: any Red Hat Enterprise Linux 6 provided software; Intel Parallel Studio XE 2018, including Intel's latest Fortran and C++ compilers; Harris Geospatial's IDL8.7; Stata 14; a variety of MPI implementations (Open MPI, MPICH2 from Argonne National Lab, MVAPICH2 from Ohio State University); and NVIDIA CUDA with Machine Learning modules.

All residence hall rooms are equipped with cable TV programming via Internet TV, an app for your mobile device, or your standard coaxial connection. Cable television, while providing a recreational outlet, plays an important role by providing access to campus information and educational offerings. For instructions on streaming TV services for your devices, visit https://is.wfu.edu/services/stream2/.

Libraries

The libraries of Wake Forest University support instruction and research at the undergraduate level and in the disciplines awarding graduate degrees. The libraries of the University hold membership in the Association of Southeastern Research Libraries. The Wake Forest University libraries include the Z. Smith Reynolds (ZSR) Library, which is located on the Reynolda Campus and supports the undergraduate College, the Wake Forest School of Business programs, the Graduate School of Arts and Sciences, and the School of Divinity. The Professional Center Library, housed in the Worrell Professional Center on the Reynolda Campus, serves the School of Law. The Coy C. Carpenter Library serves the Wake Forest School of Medicine and is located on the Bowman Gray Campus.

The three library collections total over 2.4 million titles, including over 1.4 million e-books, more than 100,000 electronic journals and over 15,000 DVDs as well as streaming media and other formats. The ZSR Library serves as a congressionally designated selective federal depository. The Professional Center Library holds nearly 130,000 volumes and the Coy C. Carpenter Library holds nearly 27,000 volumes. The three libraries share an online search portal, which provides access to books, electronic resources, journals and databases. Through interlibrary loan service, students, faculty and staff may obtain materials from other libraries at no charge.

The Z. Smith Reynolds Library provides comprehensive reference and research services in-person and online. Research Librarians work with individual classes across the disciplines on research papers and one-on-one with students at all phases of the research process. Library faculty also teach elective courses in the fundamentals of research and information literacy and upper-level courses geared towards research in the disciplines and special topics in information. The Digital Initiatives & Scholarly Communication librarians and staff support and empower faculty scholarship through digital tools, methods, publication, and preservation.

Special Collections & Archives (SCA) in Z. Smith Reynolds Library is the repository for the Baptist Historical Collection of North Carolina (the Ethel Taylor Crittenden Collection), Personal Collections & Manuscripts, the Rare Book Collection, and the University Archives. The Baptist Historical Collection contains significant books, periodicals, manuscripts, and church records relating to North Carolina Baptists, as well as the personal papers of prominent ministers, educators, and government officials with ties to Wake Forest. SCA’s Personal Collections & Manuscripts include the papers of alumnus Harold Hayes (editor of Esquire magazine in the 1960s and 1970s) and other alumni, the Maya Angelou Film & Theater Collection, and the records of the Dolmen Press. The Rare Books Collection, which includes the collections of Charles H. Babcock, Charles Lee Smith, and other donors, has collection strengths in 18th-20th century British, American, and Irish literature, African-American history and literature, and the history of material texts. SCA maintains the University Archives which serves as the primary repository for the historical records of Wake Forest University. The University Archives collects, describes, preserves, and exhibits University records that contain historical, administrative, legal, or fiscal value. The records include documentation of the student experience, departmental records, and the papers of faculty. All are welcome to use the SCA collections, many of which are available online, and to visit the Research Room, which hosts exhibits and events, in addition to researchers.

Multimedia equipment, Chromebooks, tablets, and other technology devices may be reserved for checkout. The library has ten group study rooms that are equipped with large screen monitors. These rooms can be booked online at zsr.wfu.edu/studyrooms. Publicly available Windows and Macintosh computers are available in the Scholars Commons and Reference areas, and media viewing stations are available in the Media Room. The Reference Desk and online chat are available to help library visitors to find resources and research assistance. The library has a 118-seat auditorium for use by Wake Forest community groups for programs, lectures, and film screenings. There is also the ZieSta Room, a space for students to take a break from studying to nap or rest in comfortable loungers. Z. Smith Reynolds Library houses the Information Systems Service Desk, the Teaching and Learning Collaborative, and The Writing Center. The Teaching and Learning Collaborative is a resource center for Wake Forest faculty at all stages of their careers. The Writing Center provides help to students through their writing process. The library is open continuously during the fall and spring semesters 24 hours a day from Sunday through Thursday, and daytime hours Friday and Saturday. Two 24-hour study rooms are located near the entrance to the library and may be accessed by keycard even when the library is closed. The study room on one side houses a Starbucks. A full description of the Z. Smith Reynolds Library resources and services is found at zsr.wfu.edu.