

NATIONAL TECHNICAL INSTITUTE FOR THE DEAF PROGRAM GOALS AND STUDENT LEARNING OUTCOMES

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The National Technical Institute for the Deaf is one of the nine colleges of Rochester Institute of Technology, and is home to the world's first and largest technological college for deaf and hard-of-hearing students.

RIT/NTID is:

Unique. RIT/NTID serves more than 1,100 deaf and hard-of-hearing students from around the world, many of whom live, study, and work alongside hearing students on the mainstream RIT campus.

A place that levels the playing field. RIT/NTID is the most accessible college in the world for deaf and hard-of-hearing students. RIT is one of only six universities in the nation that has been named a Microsoft Accessible University.

A community of people who mentor and inspire. RIT/NTID faculty and staff specialize in educating deaf and hard-of-hearing students.

An inclusive environment where you will find your fit. A community where you will feel comfortable and make meaningful connections with classmates, faculty, and staff and find a sense of belonging from the minute you step on campus.

3D Graphic Technology (AAS)

Program Goal #1: Develop a high degree of technical competence in traditional media drawing and painting, animation, modeling, 3D printing, and computer based skills in 2D and 3D graphics software

- Use appropriate software applications and hardware systems in the design and production of 3D graphics projects

Program Goal #2: Develop the essential skills necessary for entry-level employment in the 3D graphics industry

- Demonstrate effective writing and presenting skills for career preparation
- Demonstrate technical skills and preparation for 3D graphics job market

Program Goal #3: Demonstrate effective project management and teamwork skills

- Manage projects from theoretical concept to final product on time, on budget, and in compliance with industry standards and sustainability guidelines

Program Goal #4: Develop effective communication, collaboration, and interpersonal skills

- Work collaboratively in multidisciplinary teams, formulating and responding to constructive team and individual feedback
- Communicate effectively with peers, design and production professionals, and clients using design and production concepts
- Demonstrate appropriate writing skills and use of technical vocabulary

Program Goal #5: Demonstrate the creative and technical skills required to create 3D graphics, 3D printouts, environmental visualization graphics, and building 3D models used in multimedia and animation

- Exhibit individual competence in 3D Graphics and production of professional quality 3D media

Program Goal #6: Demonstrate the knowledge and skills necessary to function in a global society

- Describe the interrelatedness of social, cultural, and visual communication factors that shape and impact the global 3D graphics industry and marketplace

Accounting Technology (AAS)

Program Goal #1: Develop a high degree of technical competence in order to gain entry-level employment in an accounting position

- Perform the functions of the accounting cycle for service, merchandising, and manufacturing businesses
- Demonstrate proficiency in financial literacy by effectively managing personal finances, understanding financial concepts, and making informed financial decisions.

Program Goal #2: Acquire the knowledge and skills necessary to function in a global society

- Describe the interrelatedness of social, cultural and business factors that shape and impact the global business environment

Program Goal #3: Acquire independent learning skills necessary to participate in personal and professional growth

- Tech Skill 1: Demonstrate aptitude/ability to learn quickly and apply technical knowledge
- Tech Skill 4: Demonstrate ability to transfer theory to employment situations

Administrative Support Technology (AAS)

Program Goal #1: Develop a high degree of technical competence in order to gain entry-level employment in an administrative support position

- Choose and apply appropriate computer software to effectively and accurately produce business documents
- Gain entry-level employment

Program Goal #2: Develop core interpersonal business skills for teamwork

- Demonstrate appropriate interpersonal business skills and teamwork in a professional environment

Program Goal #3: Acquire the knowledge and skills necessary to function in a global society

- Describe the interrelatedness of social, cultural and business factors that shape and impact the global business environment

Program Goal #4: Acquire independent learning skills necessary to participate in personal and professional growth

- Tech Skill 1: Demonstrate aptitude/ability to learn quickly and apply technical knowledge
- Tech Skill 4: Demonstrate ability to transfer theory to employment situations

Applied Mechanical Technology (AAS)

Program Goal #1: Develop knowledge of traditional manufacturing techniques and how they relate to basic engineering concepts

- Demonstrate competency in design and manufacturing of mechanical components

Program Goal #2: Preparation for entry to CET Mechanical Engineering Technology, Mechatronics Engineering Technology and Robotics Manufacturing Technology

- Demonstrate competency in core technical courses needed to meet admissions requirements into CET

Program Goal #3: Success in course work required in CET Mechanical Engineering Technology, Mechatronics Engineering Technology and Robotics Manufacturing Technology

- Demonstrate competency in analysis and design of structures and machine components

Program Goal #4: Success in CET BS Mechanical Engineering Technology, Mechatronics Engineering Technology and Robotics Manufacturing Technology

- Earn BS degree in CET BS Mechanical Engineering Technology, Mechatronics Engineering Technology and Robotics Manufacturing Technology

Program Goal #5: Achieve student satisfaction with AMT courses and program

- Graduates of the AMT program will indicate satisfaction with courses and program

Business Administration (AAS)

Program Goal #1: Acquire a high degree of technical competence in order to gain entry-level employment in a business administration position

- Demonstrate knowledge of fundamental business concepts and principles by analyzing issues related to business operations
- Gain entry-level employment in the Business Administration field

Program Goal #2: Apply the knowledge and skills necessary to communicate effectively in a digital society

- Comprehend and prepare standard types of business communications
- Describe the interrelatedness of social, cultural and business factors that shape and impact the global business environment

Program Goal #3: Demonstrate the knowledge and technical skills necessary to work with basic computer software programs

- Utilize business software to create, edit, and manipulate information

Program Goal #4: Apply independent learning skills to advance personal and professional growth

- Tech Skill 1: Demonstrate aptitude/ability to learn quickly and apply technical knowledge
- Tech Skill 4: Demonstrate ability to transfer knowledge of business concepts and principles to employment situations

Civil Technology (AAS)

Program Goal #1: Understand how to use productivity software to solve technical problems

- Use CAD to produce 2D technical drawings
- Solve mathematical problems as related to technical drawings

Program Goal #2: Prepare for entry to CET Civil Engineering Technology program

- Demonstrate competency in core technical courses needed to meet admissions requirements into CET Civil Engineering Technology program

Program Goal #3: Prepare for success in course work required in CET Civil Engineering Technology program

- Demonstrate competency in analysis of materials

Program Goal #4: Prepare for success in CET BS Civil Engineering Technology program

- Earn BS degree in CET Civil Engineering Technology program

Program Goal #5: Achieve student satisfaction with CT courses and program

- Graduates of the CT program will indicate satisfaction with courses and program

Mobile Application Development (AAS)

Program Goal #1: Create effective software solutions

- Analyze real world problems and efficiently code solutions

Program Goal #2: Create effective and user-friendly mobile interfaces

- Design, refine and finalize a functional and user-friendly cross-platform user interface

Program Goal #3: Publish applications across multiple platforms

- Create and test mobile applications for two or more platforms

Program Goal #4: Utilize effective professional communication and collaboration skills

- Demonstrate effective verbal and written communication skills
- Work effectively as a member of a team

Program Goal #5: Indicate overall satisfaction with the program and courses

- Synthesize educational experience to determine level of satisfaction

Applied Computer Technology (AAS/AOS)

Program Goal #1: Develop the basic skills to support Windows-platform computers within an organization

- Troubleshoot hardware problems, remove faulty components, install new components, and restore a PC to working condition
- Install, configure, troubleshoot, and maintain Windows operating systems, drivers, and application software

Program Goal #2: Develop the basic skills to support LANs within an organization

- Connect, configure, maintain, administer, secure & troubleshoot a multi-platform peer-to-peer or client/server network that supports file and print sharing

Program Goal #3: Understand the role of an IT support technician in an organization

- Demonstrate an understanding of the day to day job responsibilities and roles of an IT Support Technician within an organization

Program Goal #4: Develop skills in common applications that are used by IT support specialists in an organization

- Select and use the appropriate application to address client needs and or solve problems faced by IT support specialists

Program Goal #5: Develop the skills to support multi-platform computers and peripherals within an organization

- Troubleshoot, repair and maintain multiplatform computers and related peripherals

Program Goal #6: Develop the skills to support and secure LAN/WAN environments within an organization

- Install, configure, administer and troubleshoot a small LAN/WAN environment including servers
- Secure a LAN/WAN environment

Program Goal #7: Develop interpersonal and communication skills required to be effective on the job

- Engage as an effective and productive member on a collaborative team project
- Accurately and clearly present technical information to an audience of peers

Program Goal #8: Acquire entry into the workforce

- Apply technical knowledge and skills during a co-op work experience
- Gain entry level employment in computer support

Program Goal #9: Satisfaction with the ACT program

- Graduating students will indicate overall satisfaction with program and courses

Architectural and Civil Drafting Technology (AAS/AOS)

Program Goal #1: Develop the ability to produce accurate 2-D drawings and Building Information Modeling (BIM) projects

- Use CAD to produce 2D technical drawings
- Extract and modify orthographic technical drawings from a BIM model
- Create and use a BIM project to produce detailed sections and other details

Program Goal #2: Develop supporting skills typical of a technician in the field of architecture, civil engineering, and construction

- Identify characteristics of common construction materials
- Gather information from technical drawings and from the field
- Identify issues related to sustainability in the construction industry

Program Goal #3: Develop the skills to create and deliver presentations

- Develop a portfolio of student projects in both hard copy and electronic form
- Generate quality renderings and animations from CAD and BIM projects

Program Goal #4: Develop positive skills required to be effective on the job

- Apply technical knowledge and skills on a co-op work experience
- Indicate satisfaction with program and courses

Design and Imaging Technology (AAS/AOS)

Program Goal #1: Demonstrate effective communication and collaboration skills

- Work collaboratively in multidisciplinary teams, formulating and responding to constructive team and individual feedback
- Communicate effectively with peers, design and production professionals, and clients using design and production concepts
- Demonstrate appropriate writing skills and use of technical vocabulary

Program Goal #2: Acquire the knowledge, creative and technical skills for careers ranging from design concept to final production

- Exhibit individual competence in graphic design and/or production of professional quality graphic media
- Assemble and maintain a collection of completed work that shows technical competence and the qualities needed to effectively compete in the student's chosen career in the graphic arts industry and is used in the development of appropriate portfolios

Program Goal #3: Demonstrate the knowledge, creative and technical skills for careers ranging from design concept to final production

- Use appropriate software applications and hardware systems in the design and production of graphic media projects
- Manage and deliver a quality project from theoretical concept to final product on time, on budget, and in compliance with industry standards

Program Goal #4: Contribute creative and technical abilities in support of communities

- Design and produce graphic media for campus and community organizations

Laboratory Science Technology (AAS/AOS)

Program Goal #1: Develop and document laboratory skills appropriate for technician-level training including safety quality control, technical communication, and professional readiness

- Demonstrate adherence to quality control procedures

Program Goal #2: Develop an understanding of biological macromolecular structure and energy exchange in metabolism

- Explain how energy-consuming and energy-releasing reactions can be coupled and how this applies to metabolism; (A) Introductory
- Describe the basic units of the macromolecules (proteins, nucleic acids, carbohydrates, & lipids) and the types of linkages between them; (A) Introductory

Program Goal #3: Demonstrate use of analytical instrumentation including: electroanalytical, spectroscopy, and chromatography instruments

- Demonstrate processes & procedures to setup, run, & maintain selected electroanalytical probes/meters, molecular spectrophotometers, atomic spectrophotometers, high performance liquid chromatographers, and gas chromatographers

Program Goal #4: Demonstrate analytical chemical processes; students will be able to demonstrate mastery of analytical chemical processes including volumetric, gravimetric, titrimetric, distillation, and sample preparation techniques

- Perform sample preparation procedures and the corresponding calculations
- Perform distillations and the corresponding calculations

Program Goal #5: Demonstrate biological & biotechnology-related techniques including: sterile technique & manipulation of proteomic & genomic material

- Perform proteomic and genomic manipulation techniques
- Demonstrate appropriate microscopy technique, including sample preparation and equipment use

Program Goal #6: Develop professional skills required to be effective on the job

- Engage productively in a collaborative team project
- Apply technical knowledge and communication skills on a cooperative work experience
- Gain entry level employment in the laboratory science field
- Assess program preparation and course satisfaction

Business Technology (AOS)

Program Goal #1: AST CONCENTRATION ONLY: Develop a high degree of technical competence to gain entry-level employment in an administrative support position

- Choose and apply appropriate computer software to effectively and accurately produce business documents

Program Goal #2: AT CONCENTRATION Only: Develop a high degree of technical competence to gain entry-level employment in an administrative support position; perform the functions of the accounting cycle for service, merchandising, and manufacturing businesses

- Perform the functions of the accounting cycle for service, merchandising, and manufacturing businesses

Program Goal #3: AST CONCENTRATION Only: Develop core interpersonal business skills for teamwork

- Demonstrate appropriate interpersonal business skills and teamwork in a professional environment

Program Goal #4: Acquire the knowledge and skills necessary to function in a global society

- Describe the interrelatedness of social, cultural and business factors that shape and impact the global business environment

Program Goal #5: Acquire entry into the workforce in an office setting for either AST or AT concentration

- Gain entry-level employment

Program Goal #6: Acquire independent learning skills necessary to participate in personal and professional growth

- Tech Skill 1: Demonstrate aptitude/ability to learn quickly and apply technical knowledge
- Tech Skill 4: Demonstrate ability to transfer theory to employment situations

Precision Manufacturing Technology (AOS)

Program Goal #1: Develop technical skills and knowledge needed to transform ideas and drawings into precision machined parts

- Interpret blueprints and specifications to manufacture and inspect products
- Apply mathematical concepts & engineering graphics skills to solve machining problems
- Use Computer Assisted Programming, Computer Assisted Machining (CAD/CAM) software

Program Goal #2: Develop skills and knowledge to safely operate conventional and (CNC) machines, tools and other automatic equipment

- Set up and operate conventional lathes, mills, grinders and polishers
- Create, edit, and verify toolpaths; copy and paste parameters, toolpaths and tool associative geometry for CNC programs
- Observe and practice industry safety rules and regulations

Program Goal #3: Develop metrology skills needed to validate the quality of all machined parts and process documents

- Use precision measuring instruments and computers to control and verify quality
- Write complete inspection reports

Program Goal #4: Develop basic understanding of materials used in manufacturing including ferrous and non-ferrous metals, glass and polymers

- Identify characteristics of various industrial materials

Program Goal #5: Students will develop practical job related and employment seeking skills for careers in manufacturing, metalworking or precision optics and express satisfaction with their program of learning

- Produce machined parts and optical elements to exact specifications
- Observe and practice industry safety rules and regulations
- Demonstrate problem-solving, decision-making, responsibility, pride in self and work performance, and other learned behaviors and attitudes necessary for entering the work force
- Demonstrate technical competency on the job for an approved co-op employer, which will allow them access to participation within our global society
- Affirm satisfaction in their career/academic preparation

Applied Computer Technology (AS)

Program Goal #1: To provide students with the skills needed to transfer to the Information Technology BS degree program offered by GCCIS

- Students will demonstrate fundamental programming and web skills
- Students will complete the AS degree and be accepted into the GCCIS Information Technology BS program
- Students will indicate satisfaction with the AS program

Program Goal #2: To provide students with the skills needed to be successful in the Information Technology BS degree program offered by GCCIS

- Students will successfully progress through and graduate from the GCCIS Information Technology BS program

Applied Liberal Arts (AS)

Program Goal #1: Develop the ability to communicate in English

- Demonstrate competency in written English

Program Goal #2: Develop critical thinking and ethical reasoning required to meet the requirements of both the AS program and enrollment in the BS degree

- Demonstrate competency in each of the general education perspectives courses

Program Goal #3: Develop mathematical and scientific abilities to meet the requirements of both the AS program and enrollment in the BS degree

- Demonstrate competency in the general education mathematics and science perspective and elective courses

Program Goal #4: Develop knowledge and skills relevant to the intended BS field of study

- Demonstrate competency in the professional elective courses

Program Goal #5: Acceptance into the CLA major, or equivalent, in the student's field of study

- Apply and be granted acceptance in CLA, or its equivalent, in the intended field of study

Program Goal #6: Develop a program with which students are satisfied

- Indicate satisfaction at time of graduation and post-graduation

Business (AS)

Program Goal #1: Develop a high degree of technical competence to support the continued academic requirements that will be faced at the baccalaureate level

- Perform the functions of the accounting cycle for service, merchandising, and manufacturing businesses

Program Goal #2: Develop core interpersonal business skills for teamwork

- Demonstrate appropriate interpersonal business skills and teamwork in a professional environment

Program Goal #3: Acquire the knowledge and skills necessary to access business practices and environments represented by cultural differences and the global business environment

- Describe the interrelatedness of social, cultural and business factors that shape and impact the global business environment

Program Goal #4: Develop an innovative approach to a business problem or new business opportunity

- Identify and apply creative methods for idea generation and create a business plan outline for a new product/service

Program Goal #5: Students completing their AS degree will be accepted into Saunders College of Business Program

- Students will successfully complete all program requirements with a GPA of 2.5 or above

General Science (AS)

Program Goal #1: Acquire foundational mathematical skills to support academic success at the baccalaureate level

- Demonstrate competency in college-level algebra

Program Goal #2: Integrate and apply knowledge and laboratory skills in the chemical sciences

- Demonstrate competency in introductory general chemistry

Program Goal #3: Develop and integrate scientific knowledge necessary for success in the field of their choice

- Demonstrate competency in the professional elective courses for the A.S. degree

Program Goal #4: Provide an effective pathway to qualified deaf and hard-of-hearing students for admission into RIT baccalaureate programs or scientific careers

- Acquire foundational applied scientific knowledge for academic and career success

ASL-English Interpretation (BS)

Program Goal #1: Develop the ability to effectively communicate using ASL

- Demonstrate advanced competency in grammatical, discourse, strategic and sociolinguistic aspects of American Sign Language

Program Goal #2: Develop the ability to interpret between ASL and English

- Produce successful simultaneous English interpretations of ASL or contact signing source texts
- Produce successful simultaneous ASL interpretations of English source texts

Program Goal #3: Develop critical thinking and ethical reasoning required to function as professionals in the field of ASL/English Interpretation

- Apply the Registry of Interpreters for the Deaf Code of Professional Conduct

Program Goal #4: Develop professional dispositions and interpreting ability that lead to entry-level employment

- Display professional dispositions expected of entry-level interpreters
- Produce entry-level simultaneous English to ASL and ASL to English interpretations

Community Development and Inclusive Leadership (BS)

Program Goal #1: Students will gain knowledge of inclusive leadership theories to identify and implement strategies to achieve community goals

- Identify key historical, contemporary, national & international leaders & their successful leadership traits & decision making strategies

Program Goal #2: Students will gain knowledge of organizational theories to create, strengthen and manage change in community entities

- Analyze personal leadership strengths and weaknesses

Program Goal #3: Demonstrate interpersonal and group communication skills to foster productive, supportive, diverse and inclusive community organizations

- Exhibit interpersonal and group communication skills that empower and recognize individual's identity growth

Program Goal #4: Gain knowledge of research methodologies in preparation for community-based leadership roles

- Collect, analyze and interpret qualitative and quantitative data to develop evidence-based community strategies

Program Goal #5: Demonstrate effective written and oral communication abilities

- Construct and present comprehensive community/agency based capstone project

Program Goal #6: Achieve a high degree of competence in leadership and organizational theories and best practices to gain employment in an entry position or to gain admission to a graduate program for further study within one year of graduation

- Graduates will be employed in leadership/community development positions or be admitted to a graduate program within one year of graduation

Health Care Interpretation (MS)

Program Goal #1: Effectively interpret for deaf consumers (patients, family members, and deaf health professionals) in health care environments

- Demonstrate advanced competency in interpreting health care discourse

Program Goal #2: Integrate knowledge of health care environments and language access to build on body of knowledge in the field

- Utilize appropriate research or project design and implementation methods

Program Goal #3: Measure the quality of the program

- Determine progress on achieving program-specific knowledge and skills
- Demonstrate the ability to compile and present analysis findings in written or oral format

Secondary Education of Students Who Are Deaf or Hard of Hearing (MS)

Program Goal #1: Prepare teacher candidates as highly-qualified practitioners in the education of students who are Deaf or Hard of Hearing

- Demonstrate professional teaching qualifications and competencies through dispositions
- Demonstrate competence in the use of ASL
- Demonstrate, through written communication, knowledge of key concepts related to child and adolescent development and promotion of cognitive, affective, and behavioral development of deaf students

Program Goal #2: Prepare teacher candidates to utilize evidence-based practices, including content-specialized pedagogies and technology and educational assessments throughout their teaching experience

- Demonstrate knowledge in their respective content areas
- Exhibit the application of technology within the teaching environment
- Design strategies to assess students' learning
- Develop and refine written skills related to the implementation of lesson and unit plans

Program Goal #3: Prepare teacher candidates to support the social, academic, and communication needs of diverse deaf students in a variety of K-12 classroom environments

- Develop and modify educational experiences to meet the needs of diverse students; teacher candidates will develop a Teacher Performance Assessment demonstrating how they modify lessons, adapt classroom environments, and communication strategies to meet the diverse needs of their students
- Construct effective written lesson and unit plans
- Adapt their communication styles to meet the diverse needs of their students

Program Goal #4: Prepare teacher candidates to be lifelong, reflective learners

- Demonstrate, through written communication, knowledge of research or evidence-based practices that have been validated for students who are deaf or hard of hearing, including explicit instruction, guided instruction, peer learning, and reflection; and knowledge of how to differentiate instruction by selecting, adapting, and using instructional strategies and materials according to the characteristics of given students who are deaf or hard of hearing.