



Application for Registration of a New Program¹ In a Licensed Profession

Form Instructions:

- This application is for New York degree-granting institutions seeking to register a new program in a licensed profession or a related field. The program proposal will be evaluated by the Professional Education Program Review (PEPR) Unit in the Office of the Professions (OP).
- Institutions proposing a **professional doctoral degree program** should contact the PEPR Unit at opprogs@nysed.gov for the application process.
- Submit the application electronically to opprogs@nysed.gov. Please note: if it is determined to be necessary, a hard copy may be requested.
- When applicable, trend data to demonstrate the success of students (e.g., licensure examination pass rates, completion rates, etc.) in the related program(s) may be requested.
- Under certain circumstances, proposed programs may require amendment of the institution's master plan and/or charter or certificate of incorporation, in addition to program registration.

Master Plan Amendments

Approval of a [master plan amendment](#) is required when the institution seeks initial authorization to award a degree; offers its first program at a new level of study; establishes a branch campus or inter-institutional program; or establishes at each degree level its first program in each of the 10 general disciplinary areas.

Charter Amendments and Similar Authorizations

The Board of Regents incorporates independent, not-for-profit colleges and universities by issuing a charter, which defines the institution's legal authority and the location and scope of its programs of study and the degrees it may award. Charter amendments may be needed for such actions as initial authority to award degrees; new degree titles, including degrees at new levels; change of location or establishment of a branch campus; and operation beyond the specified limitations in the existing charter.

A proposal for registration from a proprietary college may require amendment of the college's [certificate of incorporation](#) on file with the Department of State. Such amendments require the [consent](#) of the Commissioner of Education.

More information about [charter amendments](#) and similar authorizations is available online.

- More resources on program registration can be found in the [Program Registration Guidelines and Resources document](#).

¹ CUNY and SUNY institutions: contact System Administration for program registration guidance.
Rochester Institute of Technology – New Program – AAS Precision Manufacturing Technology

Program registration is based on standards in the [Regulations](#) of the Commissioner of Education. [Section 52.1](#) defines the curricula that must be registered. The Department registers individual curricula rather than the institution as a whole, but the registration process addresses major institutional elements. It is the chief means by which the Regents support the quality of college and university programs. Please enter the requested information about the proposed program.

Section I: General Information

Item	Response (<i>type in the requested information</i>)
Institution information	Date of Proposal: 6/10/2025 Institution Name: Rochester Institute of Technology Address: 12 Lomb Memorial Dr., Rochester, NY 14623 <i>Additional information:</i> ▪ Specify campus where program will be offered, if other than the main campus: ▪ If any courses will be offered off campus, indicate the location and number of courses and credits:
Program information	Program title: Precision Manufacturing Technology <u>Award</u> (e.g., B.A., M.S.): A.A.S. Maximum Number of Credits: 77 Proposed <u>HEGIS Code</u> : 5312.00 Certification/licensure title(s) that the program leads to: N/A If the program is credit bearing <i>and</i> will lead to a Certificate or an Advanced Certificate, indicate the <u>registered degree program(s)</u> to which the credits apply:
Program format	Check all program scheduling and format features that apply: (See <u>definitions</u>) i) Format: <u>X</u> _Day __Evening __Weekend __Evening/Weekend __Not Full-Time ii) Mode: <u>X</u> _Standard __Independent Study __External __Accelerated __Distance Education (submit <u>distance education application</u> with this proposal) iii) Other: __Bilingual __Language Other Than English __Upper Division Program
Contact person for this proposal	Name and title: Dr. Christine M. Licata, Vice Provost Telephone: 585-475-2953 E-mail: Christine.Licata@rit.edu
CEO (or designee) approval	Name and title: Dr. Prabu David, Provost and Senior VP for Academic Affairs Signature and date: <u>Prabu David</u> 06/11/2025 Prabu David (Jun 11, 2025 16:16 EDT)
<i>Signature affirms the institution's commitment to support the proposed program.</i>	If the program will be registered jointly² with another institution, provide the following information:
	Partner institution's name:
	Name and title of partner institution's CEO: Signature of partner institution's CEO:

² If the partner institution is non-degree-granting, see [CEO Memo 94-04](#).

Section II. Program Information

1. Program Description and Purpose

- a) Provide a brief description of the program as it will appear in the institution's catalog.

Answer:

The Associate in Applied Science (AAS) in Precision Manufacturing Technology is a career-focused program designed to meet the demand for specialized skill set trades in machinist and computer numerical control (CNC) operators in the manufacturing sector by preparing deaf and hard-of-hearing (D/HH) students for employment in precision manufacturing technology industries through the acquisition of skills in computer aided design (CAD), computer numerical control (CNC) machining, tool and die making, and instrument making. Upon completion of the associate degree, students will be able to set up and operate lathes, milling machine tools, grinders, polishers, computer numerical controlled machine tools, and computer-aided manufacturing systems; shape material into precision parts by conventional and nonconventional processes; follow blueprints; and use advanced measuring techniques to inspect work quality. Graduates will be successfully employed in both large manufacturing corporations and small contract manufacturing shops.

For qualified students, this program also offers pathways into baccalaureate-level programs in mechanical engineering technology, mechatronics engineering technology, and robotics and manufacturing engineering technology offered by the College of Engineering Technology at the Rochester Institute of Technology (RIT).

This program is available exclusively to students seeking admission to the National Technical Institute for the Deaf (NTID).

- b) List educational outcomes and (if appropriate) career objectives.

Answer:

The program goals (numbered points) and student learning outcomes (lettered subpoints) for this program are:

1. Develop technical skills and knowledge needed to transform ideas and drawings into precision machined parts.

- a. Students will manually create, edit, and troubleshoot programs utilizing Computer Aided Drafting, Computer Assisted Manufacturing (CAD/CAM) software.
- b. Students will interpret blueprints by reading and recognizing all features including machine tolerances.
- c. Students will create 3D parts using CAM, output these designs to a CNC machine, and troubleshoot programs as needed.

2. Develop skills and knowledge to safely operate conventional and computer-numerical-control (CNC) machines, tools, and other automatic equipment.

- a. Students will demonstrate an understanding of industry safety rules and regulations.

3. Develop metrology skills needed to validate the quality of all machined parts and process documents.

- a. Students will use precision measurement tools/instruments and computers to control and verify quality.
- b. Students will collaborate to create, develop, and conduct a quality control inspection.

4. Develop practical job-related and employment seeking skills for careers in manufacturing, metalworking, or precision optics.

- a. Students will demonstrate practical job-related and employment skills (problem-solving, decision-making, responsibility, pride in self and work performance).

- c) How does the program relate to the institution's mission and/or master plan?

Answer:

The AAS in Precision Manufacturing Technology supports university- and college-level missions by providing

deaf and hard-of-hearing students with a career-focused associate degree in which they acquire in-demand technical and professional skills in a design-gearred field through an academic program that incorporates aspects of the liberal arts and sciences and that requires the completion of an industry-focused co-operative work experience. Further, the college's most recent strategic plan calls for the development of additional associate+bachelor ("A+B") programs in the NTID academic portfolio. This new program enhances the college's existing Precision Manufacturing Technology program through the establishment of an articulation agreement that permits students to enter RIT's BS in Mechanical Engineering Technology, BS in Mechatronics Engineering Technology, or BS in Robotics and Manufacturing Engineering Technology.

d) If the program has sought or will seek specialized accreditation, indicate

Accrediting Organization: N/A

Date Accredited or Expected Date of Accreditation: N/A

e) Describe the role of faculty in the program's design.

Answer:

The AAS in Precision Manufacturing Technology proposal was designed by the faculty of NTID's existing AOS in Precision Manufacturing Technology program offered by the NTID Department of Engineering Studies. Faculty from the entire department reviewed the full program proposal and provided feedback. Additionally, faculty from RIT's College of Engineering Technology's Department of Manufacturing and Mechanical Engineering Technology reviewed the proposal, provided feedback, and indicated their approval. An articulation agreement that describes how credit earned toward the AAS degree will apply to one of the partner baccalaureate degrees (BS in Mechanical Engineering Technology, BS in Mechatronics Engineering Technology, or BS in Robotics and Manufacturing Engineering Technology) has been signed by both colleges.

f) Describe the input by external partners, if any (e.g., employers and institutions offering further education).

Answer:

An Industry Advisory Board (IAB) met on several occasions to review the existing AOS in Precision Manufacturing Technology program. This board is composed of 11 representatives from the manufacturing industry holding positions such as plant manager, lathe supervisor, apprentice coordinator, process engineer, and milling manager at companies including Caldwell Manufacturing, Tobyhanna Army Depot, Bausch+Lomb, MWI Inc., Volvo, and GleasonWorks. Three individuals from RIT BS level programs and NTID employment advisors who work with the existing AOS in Precision Manufacturing Technology program were also invited to participate. The advisory board made recommendations to increase flexibility, enhance the strengths of the existing program, and to improve its marketability. One significant outcome that resulted from this effort was the recommendation that an AAS degree option be established with the expectation that students with the added skills required by such a degree will indicate that they are more conducive to continuing education on the job and to career advancement.

g) What are the anticipated Year 1 through Year 5 enrollments?

Answer: For this five-semester, two-and-a-half year program, enrollments are projected to be:

Year 1: 8 students

Year 2: 15 students

Years 3 through 5: 20 students

These enrollments will be in addition to the enrollment of students in the existing AOS in Precision Manufacturing Technology.

2. Sample Program Schedule

a) Complete Table 1a (for [undergraduate](#) programs) or Table 1b (for [graduate](#) programs).

- If the program will be offered through a nontraditional schedule, provide a brief explanation of the schedule, including its impact on financial aid eligibility.

- b) Please indicate hours of instruction and supplementary assignments per semester hour of credit:
- Hours of direct instruction per semester hour of credit: 1 hour of direct instruction per week (15 hours per semester credit)
 - Hours of supplementary assignments per semester hour of credit: 2 hours of supplementary assignments per week (30 hours per semester credit)
 - If there will be laboratory or clinical hours, please indicate the credit-to-contact hour ratio: 1 credit per 3 laboratory hours per week (45 hours per semester credit)

- c) For master's degree programs, identify any research or a comparable occupational or professional experience component(s) (e.g., passing a comprehensive test, writing a thesis based on independent research, or completing an appropriate special project), including course number if applicable: N/A

3. Faculty

- a) Complete the faculty table (Tables 2-4) that describe full-time faculty, part-time faculty, and/or faculty to be hired, as applicable. Faculty curricula vitae should be provided upon request.
- b) Please explain why the size and expertise of the proposed faculty is appropriate to the proposed program. If additional faculty will be hired, please provide a detailed hiring plan.
- c) If existing faculty members will direct study in the proposed program(s), please explain the impact of the proposed program(s) on the existing program(s) in terms of faculty resources and indicate the total course load of faculty teaching in existing program(s) and the proposed program(s).

Answer:

RIT/NTID already offers an AOS in Precision Manufacturing Technology. The core faculty in that program will also instruct students who are enrolled in the AAS version of this major. As indicated in [Table 2](#), these instructors not only have industrial experience in the field but they are also all proficient in American Sign Language and have considerable experience teaching deaf and hard-of-hearing students. Following NTID standards, the enrollment capacities for program courses will be 12 students or fewer and students in the AOS and AAS programs will take program courses together. Because enrollment projections for the AAS program indicate that an additional section of all of the existing first-year courses will be needed, one new non-tenure-track instructor will be hired by the start of the Fall 2026 academic term as indicated in Table 4 (Faculty to be Hired Table) to cover these additional course sections. Assuming that current NTID enrollment and persistence rates for associate degree-seeking students apply to students in the new AAS program, no additional sections of the second- and third-year courses will be necessary since the AAS students will occupy seats that are currently unoccupied by AOS students.

3. Faculty (continued)

- d) Indicate faculty to student ratio for the existing program(s) and explain how those ratios will be maintained for the combined existing program(s) and the proposed program(s).

Answer:

Per NTID standards, class sizes will be 12 deaf and hard-of-hearing students or fewer to facilitate direct instruction and to accommodate safe use of laboratory equipment. The enrollment projections show that in and after the third year after the AAS program has been implemented, enrollment in the existing AOS and the new AAS in Precision Manufacturing Technology will be 16 first-year students, 12 second-year students, and 8 third year students, giving a total of 36 students. With 3.5 FTE faculty members (including the department chair and program coordinator but excluding the math instructor) assigned to program courses, the faculty-to-student ratio will be 1:10.

4. Financial Resources and Instructional Facilities

- a) Describe the instructional facilities (including laboratories) and equipment committed to ensure the success of the program. If applicable, please explain what courses will be offered at the labs and the staffing for the lab(s).

Answer:

This program will operate in the classroom and laboratory spaces currently used by the college's existing AOS in Precision Manufacturing Technology program. There will be no incremental costs related to the space needs associated with the implementation of this program, which will use existing lab and classroom spaces within NTID. This laboratory space is already well-outfitted with machining equipment including:

- Three Clausing/Colchester Model 8027J lathes
- Two HAAS TL-1 Toolroom lathes
- One Leblond Makino Precision Regal Servo-Shift lathe
- Five Bridgeport Knee mills with Prototrak controller (SMX)
- One Bridgeport Knee mill with Prototrak controller (KMX)
- One HAAS TM-1 mill with 4-axis capability
- One HAAS TM-1 mill with TRT100 5-axis capability
- One HAAS TM-2P mill with TRT100 5-axis capability
- One TL-1 lathe with A2-5 nose
- Two TL-1 lathes with A2-5 nose and Visual Part Programming System (VPS)
- One Hardinge VMC-600 II mill
- One SoDICK AQ300L electric discharge machine
- Two Starett HB400 comparators with M2E touch screen
- Bandsaws, surface precision grinders, surface testers, heavy duty workstations
- Licenses for 2023 Mastercam (with 4th and 5th axis), 2020 SolidWorks, Autodesk Fusion 360, Esprit

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- b) Complete the [new resources table](#) (Table 5). If applicable, please elaborate on the plan for new or renovating the labs, including the timeline.

Shown in Table 5 are the anticipated expenses for the one new faculty member to be hired, the additional consumable materials necessary to support the additional students, and the tuition-related charges for non-NTID courses taken by students in the new AAS program.

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- c) Describe process for maintaining and replacing resources necessary to accomplish the outcomes of the program.

Answer:

NTID receives a significant portion of its annual funding directly from the US federal budget. As a result of yearly federal appropriations, NTID can consider requests for the purchase and maintenance of technical equipment on an annual basis.

5. Proposed Program Budget, Revenue, and Expenses: Provide information to indicate proposed program budget, revenue, and expenses for year 1 through year 3. Please list the major line items.

Answer:

This information is provided in [Appendix A](#).

6. Library Resources

- a) Summarize the analysis of library resources for this program by the collection librarian and program faculty. Include an assessment of existing library resources and their accessibility to students enrolled in all program formats.

Answer:

In her letter of support, Joan Naturale (NTID librarian) provided the following analysis of current library resources that will be available to students in the AAS in Precision Manufacturing Technology

... Given the library's current holdings and beneficial partnerships, RIT Libraries can adequately support the

needs of the proposed Precision Manufacturing Technology AAS degree program based on recommendations from NTID Librarian Joan Naturale and Roman Koshykar, the Kate Gleason College of Engineering (KGCOE) Librarian.

Students in the AAS program will have the same access to library resources that our BS and MS students in the engineering technology programs have.

... RIT Libraries can adequately support the needs of the proposed Precision Manufacturing Technology Associate in Applied Science (AAS) degree program.

b) Describe the institution's response to identified needs and its plan for library development.

Answer:

RIT Libraries is a Rochester Regional Library Council (RRLC) member. This membership allows RIT faculty and students to borrow materials, not in our collection from other member libraries in Monroe County. Materials not owned by RIT Libraries are obtained through Interlibrary Loan (all types of materials). While these items are free to the requester, the library incurs expenses for these transactions and has a budget for these just-in-time needs.

7. Admissions:

a) List all institutional and program admission requirements.

Answer:

Although admission to RIT is competitive, applicants are reviewed holistically to determine their potential for success in an academic program. In general, students seeking admission to this program are expected to submit records of previous academic performance, such as high school and/or college transcripts. Although students are welcome to submit SAT and ACT scores, RIT is "test optional" for all undergraduate programs. Applicants may choose whether to report these test scores with their application. Students who complete the ACT may submit scores with or without the optional writing section.

Students must also submit at least one letter of recommendation, a personal essay, and a provider-signed audiogram that includes all hearing test results and etiology. An audiogram is needed to determine eligibility for the reduced tuition rate for deaf and hard-of-hearing students. The audiogram has no role in determining academic admissibility.

International applicants only: Students whose native language is not English must submit results of the TOEFL, IELTS or PTE Academic examination. Only the reading and writing sections are required for deaf and hard-of-hearing students. Testing can be self-reported, but an official report is required prior to enrollment. (<https://www.rit.edu/ntid/admissions/first-year-application#application-checklist>)

Consistent with the admissions requirements for NTID's other A+B (associate degrees that lead to a bachelor's degree) programs, students must demonstrate completion of:

- Three years of math
- Two years of science
- English language skills as evidenced by application materials

Students admitted to an A+B program generally have a high school grade average between 81 and 88. The middle 50% of accepted applicants for 2023 who provided ACT results had composite scores in the range of 18 to 21.

b) Describe enrollment periods.

Answer:

Admission to NTID occurs on a rolling basis, primarily for the fall semester when the technical coursework begins. Students can also be admitted for spring semester and can take supporting coursework in English, mathematics, and liberal arts that apply toward the degree while they wait to begin technical coursework in the following fall semester.

c) Describe the process for evaluating exceptions to those requirements.

Answer:

Admission directly into an NTID academic program happens during the recruiting and admissions process if students meet the criteria indicated above, given that they are strong indicators that a student will indeed place into the appropriate math and English level. However, formal confirmation of student placement into the English and math courses required for this program does not happen until students take placement exams during NTID's Summer Vestibule Program (SVP) prior to a student's first academic term. In some rare instances, students who do not meet the criteria for the AAS in Precision Manufacturing Technology (PMT-AAS) during the admission process to NTID do place into the required math and English courses during SVP. When this happens, students meet with an academic advisor and the program director to determine which academic program is the best fit.

Students may also wish to transfer into PMT-AAS from another program. The most likely pathways are from NTID's Career Exploration Studies program or from the AOS in Precision Manufacturing Technology. Although students will be considered on a case-by-case basis, the general criteria for accepting such students into PMT-AAS will be that they are in good academic standing, have completed NMTH-212 Integrated Algebra, and be enrolled in English course work that leads to UWRT-150 FYW: Writing Seminar.

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- d) How will the institution encourage enrollment by persons from groups historically underrepresented in the discipline or occupation?
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Answer:

As is the case with all of NTID's career-focused associate degree programs, enrollment is limited only to deaf and hard-of-hearing persons, a group that is underrepresented in the workforce. Further, NTID is already successful in recruiting students from traditionally underrepresented groups through a wide range of programs coordinated by the RIT/NTID Outreach Consortium (<https://www.rit.edu/ntid/outreach>) and will apply these efforts to this new program as well.

8. Academic Support Services: Describe the academic support services (e.g., social, psychological, health, financial and academic counseling) available to help students succeed in the program.

Answer:

Personal and career counseling, as well as academic advising, are provided to all deaf and hard-of-hearing students who enrolled in AOS, AAS, and AS-transfer degree programs. Every student is assigned to a counselor/advisor from the NTID Department of Counseling and Academic Advising Services who provides both advising and counseling services. Generally speaking, the ratio of students to CAAS advisor is 50 to 1. Students also have an employment advisor from the NTID Co-op and Career Center who provides guidance in the search for a co-operative work experience and for permanent employment. Program faculty are also expected to provide academic and professional advice to students.

NTID also provides academic tutoring in a number of ways. Students enrolled in NTID English and mathematics courses can receive faculty and peer tutoring in the NTID Learning Center (NLC). Students desiring academic assistance in their major courses may consult their instructors during office hours. Students enrolled in courses offered by one of the other colleges of RIT can receive tutoring support from NTID faculty who serve in the NTID academic support centers housed in each of the other colleges.

9. Credit for Experience: If this program will grant credit for learning derived from experience, describe the methods of evaluating the learning and the maximum number of credits allowed.

Answer:

. Requests for prior learning derived from experience will follow university policy and will be considered on a case-by-case basis at the time of application or initial enrollment. Per university policy, the amount of transfer credit or credit awarded for prior experience cannot exceed 75% of the total semester credit hours required for this degree.

10. Program Assessment and Improvement: Summarize the plan for periodic evaluation of the new program, including the use of data to evaluate educational effectiveness for program improvement.

Answer:

NTID participates fully in RIT's annual Academic Program Review (APR) process that includes a

comprehensive analysis of the structure, processes, and outcomes of the program with results typically reported to senior university leadership and the Board of Trustees. To guide this process for the AAS in Precision Manufacturing Technology program, a Program Level Outcomes Assessment Plan (PLOAP) has been developed and approved by RIT's Director of Educational Effectiveness Assessment. This PLOAP, shown in [Appendix B](#), is the same as the one that is already in place for the existing AOS in Precision Manufacturing Technology program. Program faculty use the PLOAP to prepare their annual assessment report, which is then submitted to the RIT Office of Educational Effectiveness Assessment and reviewed and scored by faculty peers from throughout the university.

11. Transfer to Baccalaureate Programs: If the program will be **promoted as preparing students for transfer to a baccalaureate program**, provide a copy of an articulation agreement with at least one institution.

Answer:

Although students in this career-focused program will be ready to seek employment in the field upon completion of the associate degree, they will also be able to apply for entry into the BS in Mechanical Engineering Technology, BS in Mechatronics Engineering Technology, or BS in Robotics and Manufacturing Engineering Technology offered by RIT's College of Engineering Technology. An articulation agreement that outlines how credit earned toward the AAS degree will apply toward each of these BS degrees is presented in [Appendix C](#).

12. External Review: If the proposal falls into any of the following categories, submit a copy of an **evaluation** of the program by a recognized expert in the field **who has been approved in advance** by the State Education Department. In addition, submit the institution's response to the evaluation and highlight how the proposal was modified in response to the reviewer's comments.

- The proposal is a **graduate level program** below the doctoral level.
- The proposal is an **undergraduate degree program in engineering or engineering technology**.
- The proposal is an **undergraduate degree program** and the program's **subject matter represents a new or emerging field**.
- The proposal is an **undergraduate degree program** in an **allied health** area, unless the institution can demonstrate that the program is accredited by an accrediting body for college-level programs in the field.

The institution shall submit two separate external reviewer reports for any **doctoral programs**.

We do not believe an external review is required because RIT already offers an AOS in Precision Manufacturing Technology (NYSED Program Code 90298), which was first registered with NYSED in September 1990 and was most recently approved by NYSED in February 2025.

Section III. Curriculum. Please contact opprogs@nysed.gov for the appropriate curriculum content chart for the proposed program.

Responses to the Engineering Curriculum Content Chart are provided in [Appendix D](#).

Table 1a: Undergraduate Program Schedule

- Indicate **academic calendar** type: X Semester Quarter Trimester Other (describe)
- Label each term in sequence, consistent with the institution's academic calendar (e.g., Fall 1, Spring 1, Fall 2)
- Use the table to show **how a typical student may progress through the program**; copy/expand the table as needed.

Term: Fall 1						Check course classification(s)					
Course Number & Title	Cr	LAS	Maj	New	Prerequisite(s)						
NCAR-10 Freshman Seminar	0										
NPMT-101 Blueprint Reading I	3		3								
NPMT-131 Precision Manufacturing Technology I	3		3		Co-req.: NPMT-101						
General Education – Elective: NMTH-212 Integrated Algebra or higher	3	3			NMTH-212: NMTH-180 with C- or better or math placement score equal to 30 or 35						
General Education – Artistic Perspective*	3	3									
General Education – Elective*	3	3									
Term credit total:	15	9	6								
Term: Fall 2						Check course classification(s)					
Course Number & Title	Cr	LAS	Maj	New	Prerequisite(s)						
NETS-110 Foundations of Materials	2		2		Co-req.: NETS-111						
NETS-111 Foundations of Materials Lab	1		1		Co-req.: NETS-110						
NPMT-201 Job Search for PMT	2		2								
NPMT-233 Precision Manufacturing Technology III	3		3		NPMT-132; Co-req.: NPMT-251						
NPMT-251 Computer Numerical Control I	3		3		NPMT-132						
Technical Elective**	3		3								
General Education – Ethical Perspective*	3	3									
Term credit total:	17	3	14								
Term: Summer 2						Check course classification(s)					
Course Number & Title	Cr	LAS	Maj	New	Prerequisite(s)						
NPMT-299 Co-op: Precision Manufacturing Technology	0		0		2 nd year standing						
Term credit total:	0		0								
Term: Spring 1						Check course classification(s)					
Course Number & Title	Cr	LAS	Maj	New	Prerequisite(s)						
NMTH-206 Trigonometry for Coordinate Analysis	3		3		NMTH-180 or higher or math placement score ³ 30						
NPMT-121 Precision Measurement I	3		3								
NPMT-132 Precision Manufacturing Technology II	3		3		NPMT-101, NPMT-131; Co-req.: NMTH-206, NPMT-121						
NPMT-214 CAD Applications	3		3								
General Education – First Year Writing	3	3									
Term credit total:	15	3	12								
Term: Spring 2						Check course classification(s)					
Course Number & Title	Cr	LAS	Maj	New	Prerequisite(s)						
NPMT-234 Precision Manufacturing Technology IV	3		3		NPMT-233						
NETS-120 Manufacturing Processes	3		3								
NPMT-252 Computer Numerical Control II	3		3		NPMT-251						
NPMT-254 Introduction to Computer Aided Manufacturing	3		3		NPMT-214, NPMT-251						
General Education – Global Perspective*	3	3									
Term credit total:	15	3	12								
Term:						Check course classification(s)					
Course Number & Title	Cr	LAS	Maj	New	Prerequisite(s)						
Term credit total:											

Term: Fall 3		Check course classification(s)				Term:		Check course classification(s)			
Course Number & Title	Cr	LAS	Maj	New	Prerequisite(s)	Course Number & Title	Cr	LAS	Maj	New	Prerequisite(s)
NPMT-235 Precision Manufacturing Technology V or Technical Elective***	3		3		NPMT-235; NPMT-234; Co-req.: NPMT-236						
NPMT-236 Precision Manufacturing Technology V Lab or NETS-101 Fundamentals of Engineering***	3		3		NPMT-236; NPMT-234; Co-req.: NPMT-235 NETS-101: None						
Technical Elective**	3		3								
General Education – Scientific Principles Perspective†	3	3									
General Education – Social Perspective*	3	3									
Term credit total:	15	6	9			Term credit total:					
Program Totals:						Credits: 77					
						Liberal Arts & Sciences: 24					
						Major: 53					
						Elective & Other: 0					

Cr: credits LAS: [liberal arts & sciences](#) Maj: major requirement New: new course Prerequisite(s): list prerequisite(s) for the noted courses

Notes:

(1) All students pursuing an Associate's degree are also required to complete one Wellness course.

* An ASL-Deaf Cultural Studies (AASASLDCS) course is required for graduation. It can be taken in any semester and can be taken at NTID or another college of RIT. In order to fulfill this requirement as part of the 77 credits in the program, it should be a course approved for *both* AASASLDCS *and* a General Education - Perspective or General Education - Elective.

** Regarding the technical electives allowance, students are strongly encouraged to prioritize the completion of NMTH-220 Trigonometry and NMTH-275 Advanced Mathematics, which together equal the content of MATH-111 Precalculus, during the AAS degree so that they are prepared for calculus and other coursework in a CET BS degree. Students who do not need to take one or both of these NMTH courses as a technical elective should take other coursework from the electives table below as appropriate for their educational and professional goals.

*** In Fall 3, students who will seek employment upon completion of the AAS degree should take NPMT-235 and NPMT-236. Students who wish to transfer to a CET BS degree at the end of the AAS degree should take NETS-101 and a technical elective that aligns with the BS degree.

† Students may apply any course with the Scientific Principles designation toward the completion of the AAS degree. Students who are working toward entering a CET BS should consider taking CHMG-131 General Chemistry for Engineers or PHYS-111 College Physics I to complete this requirement given that these courses are required for the BS in Mechanical Engineering Technology, BS in Mechatronics Engineering Technology, and the BS in Robotics and Manufacturing Engineering Technology.

Program Technical Electives			
Course Number	Title	Credits	Prerequisites
CHMG-131	General Chemistry for Engineers	3	
EEET-115	Circuits I	3	Co-requisite: EEET-116 and MATH-111 or MATH-171 or MATH-181 or MATH-181A or equivalent course
EEET-116	Circuits I Lab	1	Co-requisite: EEET-115 or equivalent course.
MATH-111	Precalculus	3	Students may not take and receive credit for MATH-101 and MATH-111.
MATH-171	Calculus A	3	Completion of the math placement exam or C- or better in MATH-111 or C- or better in ((NMTH-260 or NMTH-272 or NMTH-275) and NMTH-220) or equivalent course.
MATH-172	Calculus B	3	C- or better in MATH-171 or equivalent course.
NMTH-220	Trigonometry	3	NMTH-212 or higher or math placement score equal to 40
NMTH-275	Advanced Mathematics	3	NMTH-212 or equivalent course with a grade of C- or better or math placement score greater than or equal to 40
NPMT-102	Blueprint Reading II	3	NPMT-101
NPMT-237	Precision Grinding	3	NPMT-233 or equivalent course.
NPMT-241	Precision Optics Manufacturing I	3	NPMT-101, NPMT-121
NPMT-242	Precision Optics Manufacturing II	3	NPMT-241
NPMT-253	Advanced CNC Concepts	3	B- or better in NPMT-252 and NPMT-254
PHYS-111	College Physics I	4	
PHYS-112	College Physics II	4	PHYS-111 or PHYS-211 or equivalent course.
STAT-145	Introduction to Statistics I	3	Any 100 level MATH course, or NMTH-260 or NMTH-272 or NMTH-275 or (NMTH-250 with a C- or better) or a Math Placement Exam score of at least 35.
STAT-146	Introduction to Statistics II	4	STAT-145 or equivalent course.

Table 2: Full-Time Faculty

Note: Faculty teaching at the graduate level must have an earned doctorate/terminal degree or demonstrate special competence in the field. Provide information on full-time faculty members who will be teaching each course in the major field or graduate program.

Faculty Member Name and Title (include and identify Program Director)	Tenure Status (T, TT, or NTT) T=Tenured TT=Tenure-Track NTT=Non-Tenure-Track	Length of Time (Number of years) at the Institution	Percent Time to Program	List All Earned Degrees & Disciplines (include College/University). Disciplines must be identified.	Additional Qualifications: list related certifications/licenses; professional experience; scholarly contributions, etc.	Program Courses (Course Number and Title) Must be Listed
Karen Beiter, Associate Professor, Interim Chairperson	T	26	10%	M.S., Computer Science, Rochester Institute of Technology B.S., Computer Science, Rochester Institute of Technology	12 years of industrial experience. Proficient in American Sign Language.	NPMT-299 Coop: Precision Manufacturing Technology
Mark Davis, Senior Lecturer	NTT	7	80%	M.S., Professional Studies (Education and Human Resources), Rochester Institute of Technology B.S., Applied Arts and Science, Rochester Institute of Technology A.O.S., Computer Integrated Machining Technology, Rochester Institute of Technology	12 years of industrial experience as a machinist. Proficient in American Sign Language.	NPMT-121 Precision Measurement I (1 st of 2 sections) NPMT-233 PMT III NPMT-234 PMT IV NPMT-251 CNC I NPMT-252 CNC II NPMT-253 Advanced CNC Concepts (NPMT-207 Industrial Materials; required only for PMT-AOS)
Trisha Gard- Thompson Lecturer	NTT	6	90%	B.S., Manufacturing Engineering Technology, Rochester Institute of Technology A.O.S., Computer Integrated Machining Technology, Rochester Institute of Technology	12 years of industrial experience Proficient in American Sign Language. Currently pursuing MS in Manufacturing and Mechanical Systems Integration at RIT.	NPMT-131 PMT I (1 st of 2 sections) NPMT-132 PMT II (1 st of 2 sections) NPMT-201 Job Search for PMT NPMT-235 PMT V NPMT-236 PMT V Lab NPMT-237 Precision Grinding (1 st of 2

Faculty Member Name and Title (include and identify Program Director)	Tenure Status (T, TT, or NTT) T=Tenured TT=Tenure-Track NTT=Non-Tenure-Track	Length of Time (Number of years) at the Institution	Percent Time to Program	List All Earned Degrees & Disciplines (include College/University). Disciplines must be identified.	Additional Qualifications: list related certifications/licenses; professional experience; scholarly contributions, etc.	Program Courses (Course Number and Title) Must be Listed
						sections) NPMT-254 Intro to CAM
Marcus Holmes, Program Director , Senior Lecturer	NTT	23	40%	M.S., Professional Studies (Mech/Mfg Engineering Technology and Instructional Technology), Rochester Institute of Technology B.S., Mechanical Engineering Technology, Rochester Institute of Technology A.A.S., Industrial Drafting Technology, Rochester Institute of Technology	8 years as coordinator; 4 years of industrial experience as detailer/designer. Proficient in American Sign Language.	NPMT-101 Blueprint Reading I (1 st of 2 sections) NPMT-214 CAD Applications (1 st of 2 sections) NETS-101 Fundamentals of Engineering (1 st of 2 sections)
Gary Blatto-Vallee, Senior Lecturer	NTT	25	20%	M.S., Professional Studies (Psychology and Mathematics), Rochester Institute of Technology B.S., Mathematics, SUNY Brockport A.A.S., Educational Interpreting, Rochester Institute of Technology	Currently pursuing PhD in Mathematics Education at University at Buffalo. Proficient in American Sign Language.	NMTH-206 Trigonometry for Coordinate Analysis (two sections)

- Notes:
- The zero-credit course NCAR-10 (Freshman Seminar) is taught by a wide variety of people, mostly adjuncts and academic advisors.
 - NMTH-212 can be taught by any of the math faculty members in the NTID Department of Science and Mathematics.

Table 3: Part-Time Faculty

Note: Faculty teaching at the graduate level must have an earned doctorate/terminal degree or demonstrate special competence in the field. Provide information on part-time faculty members who will be teaching each course in the major field or graduate program.

Faculty Member Name and Title (include and identify Program Director)	Length of Time (Number of years) at the Institution	List All Earned Degrees & Disciplines (include College/University). Disciplines must be identified.	Additional Qualifications: list related certifications/ licenses; professional experience; scholarly contributions, etc.	Program Courses (Course Number and Title) Must be Listed
Not applicable				

Table 4: Faculty to be Hired

If faculty must be hired, specify the number and title of new positions to be established and minimum qualifications.

Title/Rank of Position	No. of New Positions	Minimum Qualifications (including degree and discipline area)	F/T or P/T	Percent Time to Program	Expected Course Assignments	Expected Hiring Date
Instructional/ Support Faculty, Lecturer	1	M.S., Manufacturing Engineering, Mechanical Engineering, Industrial Engineering, Manufacturing Technology, Engineering Technology, or a related field or equivalent professional experience. Industry-recognized certifications and previous teaching experience preferred . Proficiency in American Sign Language.	F/T	90%	NPMT-101 Blueprint Reading I (2nd of 2 sections) NPMT-121 Precision Measurement I (2nd of 2 sections) NPMT-131 PMT I (2nd of 2 sections) NPMT-132 PMT II (2nd of 2 sections) NPMT-214 CAD Application (2nd of 2 sections) NETS-101 Fundamentals of Engineering (2nd of 2 sections) NETS-110 Foundations of Materials NETS-111 Foundations of Materials Lab NETS-120 Manufacturing Processes	August 2026

Table 5: New Resources

List **new** resources that will be engaged specifically as a result of the new program (e.g., a new faculty position or additional library resources). New resources for a given year should be carried over to the following year(s), with adjustments for inflation, if they represent a continuing cost.

New Expenditures	Year 1	Year 2	Year 3
Personnel (Salary and Benefits)	\$108,300	\$113,500	\$116,300
Library	\$0	\$0	\$0
Equipment	\$0	\$0	\$0
Laboratories	\$0	\$0	\$0
Supplies & Expenses (Other Than Personal Service)	\$30,700	\$34,300	\$44,000
Capital Expenditures	\$0	\$0	\$0
Other (Specify: Tuition payments for RIT (non-NTID) credits taken by program students.)	\$0	\$0	\$25,500
Total all	\$139,000	\$147,800	\$185,800

Appendix A - Proposed Program Budget, Revenue, and Expenses

Department of Engineering Studies
Associate in Applied Science (AAS) in Precision Manufacturing Technology
Summary of Expenditures, Revenue, and Resource Requirements

	Year 1 AY26-27	Year 2 AY27-28	Year 3 AY28-29	Year 4 AY29-30	Year 5 AY30-31	5 Year Total
Expenses AOS/AAS:						
Personnel w/ Benefits	\$ 361,300	\$ 372,900	\$ 382,200	\$ 391,800	\$ 401,800	\$ 1,910,000
Computer Charges	\$ 26,500	\$ 42,400	\$ 54,800	\$ 56,400	\$ 58,100	\$ 238,200
Instructional Supplies	\$ 2,000	\$ 2,100	\$ 2,200	\$ 2,300	\$ 2,400	\$ 11,000
Travel-Conferences	\$ 6,800	\$ 6,800	\$ 6,800	\$ 6,800	\$ 6,800	\$ 34,000
Tuition Payments for RIT Credits	\$ -	\$ -	\$ 25,500	\$ 26,200	\$ 27,000	\$ 78,700
Overhead (RIT Indirect Costs)	\$ 59,500	\$ 63,600	\$ 70,700	\$ 72,500	\$ 74,400	\$ 340,700
Capital and Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Expense	\$ 456,100	\$ 487,800	\$ 542,200	\$ 556,000	\$ 570,500	\$ 2,612,600
Expenses AAS:						
Personnel w/ Benefits	\$ 108,300	\$ 113,500	\$ 116,300	\$ 119,200	\$ 122,200	\$ 579,500
Computer Charges	\$ 9,400	\$ 11,800	\$ 16,600	\$ 17,100	\$ 17,600	\$ 72,500
Instructional Supplies	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 5,000
Travel-Conferences	\$ 2,200	\$ 2,200	\$ 2,200	\$ 2,200	\$ 2,200	\$ 11,000
Tuition Payments for RIT Credits	\$ -	\$ -	\$ 25,500	\$ 26,200	\$ 27,000	\$ 78,700
Overhead (RIT Indirect Costs)	\$ 18,100	\$ 19,300	\$ 24,200	\$ 24,900	\$ 25,500	\$ 112,000
Capital and Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Differential Expense	\$ 139,000	\$ 147,800	\$ 185,800	\$ 190,600	\$ 195,500	\$ 858,700
Total Enrollment * ^	8	15	20	20	20	83
Tuition ^	\$ 178,500	\$ 348,744	\$ 484,521	\$ 504,871	\$ 526,076	\$ 2,042,711
Federal Appropriation ^	\$ 277,600	\$ 139,056	\$ 57,679	\$ 51,129	\$ 44,424	\$ 569,889
Total Revenue	\$ 456,100	\$ 487,800	\$ 542,200	\$ 556,000	\$ 570,500	\$ 2,612,600
Total Rev. – Total Exp.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

^ These numbers and amounts are based on total projected students for this program (which is shown here on the enrollment line). As is standard for NTID academic program projections, the total revenue matches the total expenses due to the availability of federal appropriations.

Appendix B – Program Learning Outcomes Assessment Plan (PLOAP)

Program Goals	Student Learning Outcomes	Academic Program Profile	Data Source/Measure Curriculum Mapping	Benchmark	Timeline	Data Analysis Key Findings	Use of Results Action Items and Dissemination
Please List program-level goals	Students will be able to: (task, capability, knowledge, skills, and dispositions) Use measurable verbs.	Alignment to the five RIT Educational Goals - check all that apply. ☒ Double click on the check box, find the Default Value , and click Checked to check the box. To uncheck, the box, double click and then click Not Checked .	Assessment opportunity (course/experience) method/measures, assignment/rubric)	Standard, target, or achievement level (usually a %) Statement of student Success	Identify when and how data are collected, aggregated, and analyzed	Identify who is responsible and list key findings	Identify how results are used and shared. List any recommendations or action items
Develop technical skills and knowledge needed to transform ideas and drawings into precision machined parts.	Students will manually create, edit, and troubleshoot programs utilizing Computer Aided Drafting, Computer Assisted Manufacturing (CAD/CAM) software.	☒ Critical Thinking ☐ Ethical Reasoning ☒ Integrative Literacies (Technical Literacy) ☐ Global Interconnectedness ☐ Creative/Innovative Thinking	NPMT-252 Computer Numerical Control II	80% of students will satisfy a letter grade of C or higher competency on written final exam. Note: Excludes grades of zero for non-submission	Data will be collected each semester the course is offered.	Collected by DES Dept. Assessment Coordinator(s)	Shared with the program faculty, annual college summary report, NTID Annual Report and the Results posted on TaskStream, and the greater Institute as requested.
	Students will interpret blueprints by reading and recognizing all features including machine tolerances.	☒ Critical Thinking ☐ Ethical Reasoning ☒ Integrative Literacies (Mathematical Literacy) ☐ Global Interconnectedness ☐ Creative/Innovative Thinking	NPMT-101 Blueprint Reading I	80% of students will satisfy a letter grade of C or better on final exam	Data will be collected each semester the course is offered.	Collected by DES Dept. Assessment Coordinator(s)	Shared with the program faculty, annual college summary report, NTID Annual Report and the Results posted on TaskStream, and the greater Institute as requested.
	Students will create 3D parts using CAM, output these designs to a CNC machine, and troubleshoot programs as	☒ Critical Thinking ☐ Ethical Reasoning ☒ Integrative Literacies (Technical Literacy)	NPMT-254 Intro to CAM	80% of students will satisfy a letter grade of C or better on final project	Data will be collected each semester the course is offered.	Collected by DES Dept. Assessment Coordinator(s)	Shared with the program faculty, annual college summary report, NTID Annual Report and the Results posted on TaskStream, and the

	needed.	Global ☐ Interconnectedness ☒ Creative/Innovative Thinking					greater Institute as requested.
Develop skills and knowledge to safely operate conventional and computer-numerical-control (CNC) machines, tools and other automatic equipment	Students will demonstrate an understanding of industry safety rules and regulations .	☒ Critical Thinking ☐ Ethical Reasoning ☒ Integrative Literacies (Technical Literacy) ☐ Global ☐ Interconnectedness ☒ Creative/Innovative Thinking	NPMT-235 PMT V Lecture	80% of students will satisfy a letter grade of C or better on quiz focusing on appropriate safety practices.	Data will be collected each semester the course is offered.	Collected by DES Dept. Assessment Coordinator(s)	Shared with the program faculty, annual college summary report, NTID Annual Report and the Results posted on TaskStream, and the greater Institute as requested.
Develop metrology skills needed to validate the quality of all machined parts and process documents	Students will use precision measurement tools/instruments and computers to control and verify quality.	☒ Critical Thinking ☐ Ethical Reasoning ☒ Integrative Literacies (Mathematical Literacy) ☐ Global ☐ Interconnected-ness ☐ Creative/Innovative Thinking	NPMT-121 Precision Measurements I	80% of students will satisfy a letter grade of C or better overall on final project.	Data will be collected each semester the course is offered.	Collected by DES Dept. Assessment Coordinator(s)	Shared with the program faculty, annual college summary report, NTID Annual Report and the Results posted on TaskStream, and the greater Institute as requested.
	Students will collaborate to create, develop, and conduct a quality control inspection	☒ Critical Thinking ☐ Ethical Reasoning ☒ Integrative Literacies (Technical Literacy) ☐ Global ☐ Interconnected-ness ☒ Creative/Innovative Thinking	NPMT-236 PMT V Lab	80% of students will satisfy a letter grade of C or better on final project.	Data will be collected each semester the course is offered.	Collected by DES Dept. Assessment Coordinator(s)	Shared with the program faculty, annual college summary report, NTID Annual Report and the Results posted on TaskStream, and the greater Institute as requested.
Develop practical job related and employment seeking skills for careers in manufacturing, metalworking or precision optics	Students will demonstrate practical job-related and employment skills (problem-solving, decision-making, responsibility, pride in self and work performance)	☒ Critical Thinking ☒ Ethical Reasoning ☒ Integrative Literacies (Technical Literacy) ☒ Global ☒ Interconnected-ness ☐ Creative /Innovative Thinking	NC3 Alumni Data: Co-op Self Assessment Evaluation Form	NCE Alumni data Co-op Self Assessment Evaluation Form; 80% of students will score 3 or more on a 1-5 evaluation scale	Data will be collected each semester the course is offered, and the cumulative result will be analyzed and reported every year.	Collected by DES Dept. Assessment Coordinator(s)	Shared with the program faculty, annual college summary report, NTID Annual Report and the Results posted on TaskStream, and the greater Institute as requested.

Appendix C – Articulation Agreement

Transfer Articulation Agreement

Between the Department of Manufacturing and Mechanical Engineering Technology, College of Engineering Technology, RIT

B.S. in Mechanical Engineering Technology,

B.S. in Mechatronics Engineering Technology, and

B.S. in Robotics and Manufacturing Engineering Technology

and the Department of Engineering Studies, National Technical Institute for the Deaf, RIT

A.A.S. in Precision Manufacturing Technology

Purpose

This articulation agreement is established between the NTID Department of Engineering Studies and the Department of Manufacturing and Mechanical Engineering Technology in the College of Engineering Technology (CET) to assist in facilitating timely student progress from the A.A.S. degree level into a B.S. program, thereby attracting qualified students to CET and encouraging academic cooperation and exchange of information between NTID and CET. Students enrolled in the A.A.S. in Precision Manufacturing Technology will work toward admission into the B.S. in Mechanical Engineering Technology, B.S. in Mechatronics Engineering Technology, or the B.S. in Robotics and Manufacturing Engineering Technology by successfully completing freshman- and sophomore-level science, mathematics, and core engineering coursework required for the baccalaureate program and by taking any necessary foundational coursework to prepare them for such courses. Students will also take all necessary liberal arts and English coursework to satisfy the requirements of the Associate of Applied Science degree in Precision Manufacturing Technology.

Student Qualifications for Transfer from the A.A.S. in Precision Manufacturing Technology to the B.S. in Mechanical Engineering Technology, B.S. in Mechatronics Engineering Technology, or B.S. in Robotics and Manufacturing Engineering Technology

Qualified students will:

- Be a graduate of the NTID A.A.S. in Precision Manufacturing Technology program.
- Be a student in good standing per RIT Policy D05.1.
- Have earned a cumulative GPA of at least 3.0 while in the A.A.S. in Precision Manufacturing Technology program. Students who do not meet this requirement will be considered on a case-by-case basis with particular emphasis on grades earned in their technical science and mathematics coursework.

Terms of the Agreement

I. Admissions process

- a. The process for admission to the B.S. in Mechanical Engineering Technology (MCET-BS), B.S. in Mechatronics Engineering Technology (MECA-BS), or B.S. in Robotics and Manufacturing Engineering Technology (RMET-BS) can begin as early as the student's final term in the A.A.S. in Precision Manufacturing Technology (CIMT-AAS).
 - i. These three programs are referred to collectively as “these three CET programs” for the remainder of this document.
- b. The steps in the process will be:
 - i. Student indicates to the NTID A.A.S. in Precision Manufacturing Technology program coordinator an interest in applying to enter any of these three CET programs.
 - ii. The A.A.S. program coordinator will review the student's academic qualifications based on items listed in the “*Student Qualifications for Transfer*” section indicated above.
 - iii. If the student meets the qualifications listed, the NTID program coordinator or department chair will contact the chairperson or coordinator of these three CET programs for review of the student's qualifications.
 1. If necessary, the head will call a meeting with the student and the A.A.S. program coordinator to review the student's record and to discuss the B.S. program in which the student is interested in entering.
 - iv. Upon review of the student's qualifications, the chairperson of the CET Department of Manufacturing and Mechanical Engineering Technology will inform the student and the A.A.S. program coordinator of the tentative acceptance decision.
 - v. The A.A.S. program coordinator and the CET chairperson will complete an Intent to Enroll form and submit it to the NTID and RIT admissions offices for review and final approval.

1. If the Intent to Enroll form receives all required approvals, the NTID department chair will inform the student, the A.A.S. program coordinator, and the CET chairperson of the decision.

II. Year Level and Credit Transfer

- a. Students who transfer from the A.A.S. in Precision Manufacturing Technology will do so at the third-year level into one of these three CET programs, with the placement decision being made based on the requirements listed in the “*Student Qualifications for Transfer*” section above.
- b. Upon transfer into the B.S. program, students will be responsible for completing all remaining degree requirements in order to earn the baccalaureate degree.
- c. Credit earned toward the A.A.S. degree is indicated in the student's RIT academic history and will therefore automatically populate the appropriate section within the Academic Advisement Report (AAR) for the B.S. degree once the student has been admitted to the B.S. program. Students who have earned a C- or lower in any course taken toward the A.A.S. degree and being applied to the B.S. degree may be advised to retake the course as a condition of being admitted to the B.S. program.

III. Program and Course changes

- a. The A.A.S. in Precision Manufacturing Technology, B.S. in Mechanical Engineering Technology, B.S. in Mechatronics Engineering Technology, and B.S. in Robotics and Manufacturing Engineering Technology programs will communicate any changes to their respective curricula and make any changes to this document to ensure continuation of the articulation agreement.

IV. Time limits

- a. This agreement will be formally reviewed every five years from the date of signing, or at the time of any major curriculum change.

V. Autonomy

- a. The A.A.S. in Precision Manufacturing Technology program will be free to admit qualified non-matriculated, NTID-supported students who apply to the program through the normal RIT freshman admissions process. If students are deemed “underprepared” then a recommendation should be made to NTID for admissions opportunities.

A.A.S. in Precision Manufacturing Technology Transfer of Courses to B.S. in Mechanical Engineering Technology						
COURSES IN A.A.S. DEGREE				COURSES ACCEPTED TOWARD B.S. DEGREE		
Course No.	Course Title (A.A.S. Degree Requirement)	Cr.		Course No.	Course Title (B.S. Degree Requirement)	Cr.
<i>Major Courses (including major-related coursework that satisfies general education and open electives requirements)</i>						
NETS-101	Fundamentals of Engineering	3		MCET-101	Fundamentals of Engineering	3
NETS-110	Foundations of Materials	2		MCET-110	Foundations of Metals	2
NETS-111	Foundations of Materials Lab	1		MCET-111	Characterization of Metals Lab	1
NETS-120	Manufacturing Processes	3		RMET-120	Manufacturing Processes	3
NPMT-131	Precision Manufacturing Technology I	3		RMET-105	Machine Tools Lab	1
NPMT-201	Job Search for PMT	2		ENGT-95	Career Seminar	0
NPMT-214	CAD Applications	3		MCET-150	Engineering Communication and Tolerancing	3
NPMT-234	Precision Manufacturing Technology IV	3			Technical Elective	3
NPMT-299	Co-op: PMT	0		MCET-499	MCET Co-op (students must complete additional co-ops for the BS degree)	0
NPMT-xxx	Any 9 additional credits of NPMT coursework	9		NPMT-xxx	Open electives	9
	Technical electives coursework that aligns with required courses in the BS program (CHMG-131, EEET-115/-116, MATH-171, MATH-172, PHYS-111, PHYS-112, STAT-145, STAT-146)	0-12*			Any 0-12 credits of CHMG-131, EEET-115/-116, MATH-171, MATH-172, PHYS-111, PHYS-112, STAT-145, STAT-146.	0-12*
<i>General Education Courses</i>						
UWRT-150	FYW: Writing Seminar (General Education – First Year Writing)	3		UWRT-150	FYW: Writing Seminar (General Education - First Year Writing)	3
	General Education - Ethical Perspective	3			General Education - Ethical Perspective	3
	General Education - Artistic Perspective	3			General Education - Artistic Perspective	3
	General Education - Global Perspective	3			General Education - Global Perspective	3
	General Education - Social Perspective	3			General Education - Social Perspective	3
	General Education – Scientific Principles Perspective (Students may take any course with the Scientific Principles designation to earn the AAS degree. However, completion of CHMG-131, PHYS-111, or PHYS-112 is ideal so that the credit can be applied to the BS degree.)	0-4*			General Education – Scientific Principles Perspective: CHMG-131 General Chemistry for Engineers General Education – Natural Science Inquiry Perspective: PHYS-111 College Physics I General Education – Elective: PHYS-112 College Physics II (Any other science course taken toward the AAS degree will not count toward MCET-BS because MCET-BS does not include any additional gen ed electives.)	0-4*

	General Education – Elective: NMTH-212 or higher	3			General Education – Elective	3
	General Education - Elective	3			General Education – Elective	3
<i>Other Courses</i>						
NCAR-010	Freshman Seminar	0		YOPS-010	RIT 365: RIT Connections	0
	Wellness course	0			Wellness course	0
					Total Transfer Credits	46-62
* The transferability of credit indicated by an asterisk depends on whether or not the student completes any of the indicated BS-required courses during the AAS degree.					Percent of A.A.S. Credits Transferred	60-81%

A.A.S. in Precision Manufacturing Technology Transfer of Courses to B.S. in Mechatronics Engineering Technology						
COURSES IN A.A.S. DEGREE				COURSES ACCEPTED TOWARD B.S. DEGREE		
Course No.	Course Title (A.A.S. Degree Requirement)	Cr.		Course No.	Course Title (B.S. Degree Requirement)	Cr.
<i>Major Courses (including major-related coursework that satisfies general education and open electives requirements)</i>						
NETS-101	Fundamentals of Engineering	3		MCET-101	Fundamentals of Engineering	3
NETS-110	Foundations of Materials	2		MCET-110	Foundation of Metals	2
NETS-111	Foundations of Materials Lab	1		MCET-111	Characterization of Metals Lab	1
NETS-120	Manufacturing Processes	3		RMET-120	Manufacturing Processes	3
NPMT-131	Precision Manufacturing Technology I	3		RMET-105	Machine Tools Lab	1
NPMT-201	Job Search for PMT	2		ENGT-95	Career Seminar	0
NPMT-214	CAD Applications	3		MCET-150	Engineering Communication and Tolerancing	3
NPMT-299	Co-op: PMT	0		MECA-499	MECA Co-op (students must complete additional co-ops for the BS degree)	0
NPMT-xxx	Any 12 credits of unused NPMT coursework	12		NPMT-xxx	Open electives	12
	Technical electives coursework that aligns with required courses in the BS program (CHMG-131, EEET-115/-116, MATH-171, MATH-172, PHYS-111, PHYS-112, STAT-145, STAT-146)	0-12*			Any 0-12 credits of CHMG-131, EEET-115/-116, MATH-171, MATH-172, PHYS-111, PHYS-112, STAT-145, STAT-146	0-12*
<i>General Education Courses</i>						
UWRT-150	FYW: Writing Seminar (General Education – First Year Writing)	3		UWRT-150	FYW: Writing Seminar (General Education - First Year Writing)	3
	General Education - Ethical Perspective	3			General Education - Ethical Perspective	3
	General Education - Artistic Perspective	3			General Education - Artistic Perspective	3
	General Education - Global Perspective	3			General Education - Global Perspective	3
	General Education - Social Perspective	3			General Education - Social Perspective	3

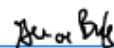
	General Education – Scientific Principles Perspective (Students may take any course with the Scientific Principles designation to earn the AAS degree. However, completion of CHMG-131, PHYS-111, or PHYS-112 is ideal so that the credit can be applied to the BS degree.)	0-4*		General Education – Scientific Principles Perspective: CHMG-131 General Chemistry for Engineers General Education – Natural Science Inquiry Perspective: PHYS-111 College Physics I General Education – Elective: PHYS-112 College Physics II (Any other science course taken toward the AAS degree will not count toward MECA-BS because MECA-BS does not include any additional gen ed electives.)	0-4*
	General Education - Elective	3		General Education – Elective	3
<i>Other Courses</i>					
NCAR-010	Freshman Seminar	0	YOPS-010	RIT 365: RIT Connections	0
	Wellness course	0		Wellness course	0
* The transferability of credit indicated by an asterisk depends on whether or not the student completes any of the indicated BS-required courses during the AAS degree.				Total Transfer Credits	43-59
				Percent of A.A.S. Credits Transferred	56-77%

A.A.S. in Precision Manufacturing Technology						
Transfer of Courses to B.S. in Robotics and Manufacturing Engineering Technology						
COURSES IN A.A.S. DEGREE				COURSES ACCEPTED TOWARD B.S. DEGREE		
Course No.	Course Title (A.A.S. Degree Requirement)	Cr.		Course No.	Course Title (B.S. Degree Requirement)	Cr.
Major Courses (including major-related coursework that satisfies general education and open electives requirements)						
NETS-110	Foundations of Materials	2		MCET-110	Foundations of Metals	2
NETS-111	Foundations of Materials Lab	1		MCET-111	Characterization of Metals Lab	1
NETS-101	Fundamentals of Engineering	3		MCET-101	Fundamentals of Engineering	3
NETS-120	Manufacturing Processes	3		RMET-120	Manufacturing Processes	3
NPMT-131	Precision Manufacturing Technology I	3		RMET-105	Machine Tools Lab	1
NPMT-201	Job Search for PMT	2		ENGT-95	Career Seminar	0
NPMT-214	CAD Applications	3		MCET-150	Engineering Communication and Tolerancing	3
NPMT-299	Co-op: PMT	0		RMET-499	RMET Co-op (students must complete additional co-ops for the BS degree)	0
NPMT-xxx	Any 10 credits of unused NPMT coursework	10		NPMT-xxx	Open electives	10
	Technical electives coursework that aligns with required courses in the BS program (CHMG-131, EEET-115/-116, MATH-171, MATH-172, PHYS-111, PHYS-112, STAT-145, STAT-146)	0-12*			Any 0-12 credits of CHMG-131, EEET-115/-116, MATH-171, MATH-172, PHYS-111, PHYS-112, STAT-145, STAT-146	0-12*
General Education Courses						
UWRT-150	FYW: Writing Seminar (General Education – First Year Writing)	3		UWRT-150	FYW: Writing Seminar (General Education - First Year Writing)	3
	General Education - Ethical Perspective	3			General Education - Ethical Perspective	3
	General Education - Artistic Perspective	3			General Education - Artistic Perspective	3
	General Education - Global Perspective	3			General Education - Global Perspective	3
	General Education - Social Perspective	3			General Education - Social Perspective	3
	General Education – Scientific Principles Perspective (Students may take any course with the Scientific Principles designation to earn the AAS degree. However, completion of CHMG-131 or PHYS-111 is ideal so that the credit can be applied to the BS degree.)	0-4*			General Education – Scientific Principles Perspective: CHMG-131 General Chemistry for Engineers General Education – Natural Science Inquiry Perspective: PHYS-111 College Physics I PHYS-112 College Physics II (Any other science course taken toward the AAS degree will not count toward RMET-BS because RMET-BS does not include any additional gen ed electives.)	0-4*

	General Education – Elective	3		General Education - Elective	3
<i>Other Courses</i>					
NCAR-010	Freshman Seminar	0	YOPS-010	RIT 365: RIT Connections	0
	Wellness course	0		Wellness course	0
* The transferability of credit indicated by an asterisk depends on whether or not the student completes any of the indicated BS-required courses during the AAS degree.				Total Transfer Credits	41-57
				Percent of A.A.S. Credits Transferred	53-74%



S. Manian Ramkumar
Dean
College of Engineering
Technology



[Gerard Buckley \(Mar 5, 2025 21:09 EST\)](#)

Gerard J. Buckley, President
RIT Vice President and Dean
National Technical Institute for the Deaf



Mike Eastman
Sr. Assoc. Dean for Academic Affairs
College of Engineering Technology



Gary Behm
Associate Vice President for
Academic Affairs
National Technical Institute for the Deaf



Beth Carle
Interim Chair
Department of Manufacturing and
Mechanical Engineering Technology
College of Engineering Technology



Karen Beiter
Interim Chair
Department of Engineering Studies
National Technical Institute for the Deaf

Appendix D - Engineering Curriculum Content Chart

1. Planning.

- a. Please explain the motivations for proposing the new engineering program, including the employment opportunities for graduates.
 - **Although the National Technical Institute for the Deaf (NTID) at Rochester Institute of Technology (RIT) has offered the AOS in Precision Manufacturing Technology (PMT) for decades, there has been no AAS option for students to pursue, hence this proposal. NTID offers a range of career-focused associate degree programs that prepare deaf and hard-of-hearing students for employment. These majors are offered as Associate in Occupational Studies (AOS) and Associate in Applied Science (AAS) pairs (e.g., AOS in Laboratory Science Technology, AAS in Laboratory Science Technology) where the major-specific coursework, including a required co-operative work experience, is largely the same for the AOS and AAS programs. What distinguishes the AOS and AAS from each other is that the AAS programs include a subset of the university's Bachelor of Science general education requirements as well as non-NTID math, science, and major-related elective options near the end of the program to support a student's transition into a Bachelor of Science program at RIT. NTID's AOS programs, on the other hand, include only courses offered within NTID and have no general education requirements, which means that they do not offer students a pathway into a bachelor's degree.**
- b. Please explain the long-term plan for program viability.
 - **Given the demonstrated longevity of NTID's AOS in Precision Manufacturing Technology program (first registered with NYSED in September 1990 and most recently approved by NYSED in February 2025), we expect that being able to provide an AAS option with pathways into several BS programs offered by RIT's College of Engineering Technology (CET) will make our existing PMT program even more attractive to prospective students.**
- c. Please indicate the efforts made to seek advice from successful programs of similar scope in formulating the proposal.
 - **NTID's existing AOS and AAS program pairs provide sufficient evidence in the attractiveness of this model, justifying the addition of the AAS in Precision Manufacturing Technology. Further, the establishment of an articulation agreement into three RIT CET BS programs demonstrates the confidence that CET faculty have in NTID's PMT program.**

2. Commitment to Seek ABET Accreditation.

For programs with "engineering" in the title, it is required that the institution provide documentation that the program has been designed and will obtain ABET accreditation.

- a. Please indicate the timeline to achieve ABET accreditation (as soon as the program is eligible for accreditation).
 - **RIT will not be seeking ABET accreditation for this AAS program.**

3. Curriculum.

- a. Submit a copy of an evaluation (Word) of the program by an evaluator who has been approved in advance by the State Education Department. In addition, submit the institution's response to the evaluation and highlight how the proposal was modified in response to the reviewer's comments.
 - **We do not believe an external review is required because RIT already offers the AOS in Precision Manufacturing Technology (NYSED Program Code 90298), which was first registered with NYSED in September 1990 and most recently approved by NYSED in February 2025.**
- b. Please explain how the proposed program meets ABET accreditation standards related to curriculum. ABET standards are available here: <https://www.abet.org/accreditation/> You may submit this information in chart form. Please submit course syllabi.
 - **RIT will not be seeking ABET accreditation for this AAS program.**

4. Transfer Students.

- a. Please explain how the proposed program meets ABET accreditation standards related to students, including the plan for accepting and managing transfer students. Please specifically address the following two questions:
 - i. What are the criteria for the transfer students?
 - **Transfer students are considered for admission in the same way that first-time freshmen are considered for admission as described in the Admissions section of this application. RIT has a standardized process for awarding transfer credit for students who have taken courses elsewhere and NTID participates fully in this process.**
 - ii. How will the curriculum and resources be in place when the transferred students arrive?

- **NTID already offers all of the courses included in the AAS in Precision Manufacturing Technology since they are also offered through the AOS in Precision Manufacturing Technology. Transfer students will therefore be able to enter the new AAS program without difficulty.**