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3 NEW TRANSFER DEGREE PROGRAM PROPOSAL 4

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1. ASSOCIATE OF APPLIED SCIENCE (AAS)
2. DEGREE
3. IN
4. CIVIL TECHNOLOGY

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1. Department of Engineering Studies
2. National Technical Institute for the Deaf
3. Rochester Institute of Technology

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26 November 12, 2013

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1 **Glossary of Terms**

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3 **(RIT)** Rochester Institute of Technology

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5 **(NTID)** National Technical Institute for the Deaf, a College of RIT

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1. **(DES)** The NTID Department of Engineering Studies is the home department for the AAS degree in Civil
2. Technology.

9

1. **(AAS)** Associate of applied science transfer degree for students who wish to become successful
2. baccalaureate degree candidates in a selected RIT College but who are not qualified to do so as first year
3. students.

13

14 **(NTID Students)** Deaf and hard-of-hearing students enrolled in NTID

15

16 **(Baccalaureate Students)** Deaf and hard-of-hearing students enrolled in programs in other RIT colleges

17

18 **(BS)** Bachelor of Science Degree

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20 **(CAST)** College of Applied Science and Technology, a College of RIT

21

1. **(CVET-BS)** Civil Engineering Technology, a bachelor of science degree program in the College of
2. Applied Science and Technology (CAST) at RIT

24

25 **(CLA)** College of Liberal Arts, a College of RIT

26

27 **(COS)** College of Science, a College of RIT

28

29 **(CT)** Civil Technology, the proposed Civil Technology AAS transfer degree program

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1. **(DAS)** NTID’s Department of Access Services that provides Access services that are based upon each
2. student’s educational need and typically include sign language interpreting services, assistive listening
3. system, note-taking, or real-time captioning services.

34

1. **(Transfer Agreement)** Agreement entered into by NTID and CVET-BS whereby CVET-BS accepts
2. qualified graduates from the AAS Degree in Civil Technology into its baccalaureate program with
3. sufficient transfer credits so that the students can potentially commence studying for a bachelor of
4. science degree with junior-year status. This agreement is also referred to as the **Articulation**
5. **Agreement**.

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41

1 **1. Program Description and Purpose**

2

3 ***A. Brief description of the program as it will appear in the institution’s catalog***

4

1. The NTID’s AAS in Civil Technology is a transfer associate degree program that prepares
2. qualified students to apply for admission to the baccalaureate program in Civil Engineering
3. Technology in the College of Applied Science and Technology. Students strengthen their skills
4. by taking courses taught by NTID faculty.

9

1. These courses systematically address the preparatory challenges that deaf and hard-of-hearing
2. students face upon entry to the majors in the College of Applied Science and Technology. The
3. program capitalizes on courses offered through NTID’s Departments of Engineering Studies,
4. English, and Science and Mathematics in order to prepare qualified students for entry to the
5. baccalaureate program.

15

1. Students in the Civil Technology major receive a comprehensive foundation in civil engineering
2. fundamentals: engineering graphics, computer aided design applications, construction materials
3. and methods, surveying, statics, strength of materials, and elements of building construction.
4. Upon successful completion of the AAS degree in Civil Technology, students may enroll in the
5. bachelor’s degree program in civil engineering technology.

21

22 ***B. List Educational and Career Outcomes***

23

1. **1. Career Education:** The intent of this AAS degree is to prepare students to qualify for
2. admission to CVET-BS program with junior year status. Students will complete New
3. York State general education requirements for liberal arts, science and mathematics. In
4. addition, students will complete five (5) technical courses in the field of study of civil
5. technology. The curriculum will be responsive to technological advances in the civil
6. technology area and will prepare students to meet the demands in a continually evolving
7. workplace. The proposed program was designed to work with CAST’s BS Civil
8. Engineering Technology program and offer students a new degree option for an
9. attractive career education choice in the field of engineering studies.

33

1. **2. Critical Thinking and Analytical Skills**: In preparing for entry into the CVET-BS
2. program, students will enhance their abilities in reading, writing, visual communication,
3. critical thinking, problem solving, science, mathematics, and preparing lab reports.
4. Students will have multiple opportunities in a variety of contexts to gather, process,
5. organize and present information in technical and liberal arts courses. This program and
6. the CVET-BS program to which they will transfer will provide a basis for a lifetime of
7. intellectual inquiry.

41

1. **3. Excellence:** This proposed curriculum matches the academic rigor of CVET-BS.
2. Students will demonstrate their abilities to establish quality study skills as well as high
3. standards of analytical and ethical conduct. The students will be evaluated on their work
4. skills, attitudes, and behaviors in class.

46

1. **4. Community and Personal Growth:** Courses offer opportunities for self-discovery,
2. personal and social responsibility, and enhancement of interpersonal skills as well as
3. promoting career awareness. As members of the NTID and broader RIT communities,
4. students will have opportunities to expand their intellectual, social and cultural
5. experiences with deaf/hard-of-hearing and hearing students.

1

* 1. **5. Access:** NTID provides students with an array of opportunities to engage in learning
  2. activities at RIT. Faculty and staff work together to provide students with equal access
  3. to RIT educational and social programs.

5

1. **6. Lifelong Learning:** This program and the CVET-BS program to which they will transfer
2. will promote in students the inclination and habit of intellectual inquiry conducive to a
3. lifetime of learning.

9

10

1. ***C. How the program fits with the institution’s mission, vision, values and***
2. ***reputation.***

13

1. RIT values NTID students and looks to them to make unique and innovative contributions to
2. RIT’s academic community. President Destler, in his 2009 Address to the Institute, states that
3. “NTID is one of the crown jewels of RIT, and we must do all we can to take advantage of
4. opportunities that the presence of this college on our campus provides.”

18

1. In turn, NTID is committed to recruiting and preparing its students to meet Dr. Destler’s
2. expectations. The NTID Strategic Decisions 2020 (SD 2020) states as one of the institute’s
3. primary strategies the expansion of associate+bachelor’s degree programs, “particularly in
4. partnership with those colleges of RIT where such programs do not yet exist.” The SD 2020
5. also targets an enrollment of 255 deaf and hard of hearing students in the associate+bachelor’s
6. programs by the year 2020. For the academic year 2012, NTID had 198 students enrolled in
7. associate+bachelor’s programs. An enrollment increase of 25 percent is needed to meet the
8. targets set by SD 2020.

27

1. By joining the array of NTID AS and AAS programs that match the curriculum structure of other
2. RIT colleges, the AAS degree in Civil Technology will provide a path for students to obtain a
3. CVET-BS baccalaureate degree with a maximum of transfer credits.

31

1. The transfer agreement between NTID and CAST shows the transfer credits from the proposed
2. AAS degree (See Appendix H) into the Civil Engineering Technology program.

34

1. ***D. Describe how this program contributes to RIT’s strategic plan priorities and***
2. ***key result areas***

37

1. The proposed CT program will provide qualified deaf and hard-of-hearing students with a
2. greater chance for success in entering the CVET-BS program. The services of NTID, with its
3. expertise in addressing the needs of deaf and hard-of-hearing students, will be utilized to create
4. an educational climate within which these students will have a greater chance to achieve their
5. educational goals. In particular, the proposed CT program will contribute to RIT’s Strategic Plan
6. in the following key results areas (KRA):

44

45 *KRA-1: Be renowned for student success*

46

1. A key objective of the proposed CT program is to serve the needs of particular deaf and
2. hard-of-hearing students who would otherwise struggle in the CVET-BS program.
3. Furthermore, students who complete the proposed CT program will earn an AAS degree,
4. unlike students who enter the CVET-BS program directly, are unable to complete the
5. program, and will not earn a degree. Thus, the CT program will help to increase the

graduation rate by allowing students to earn a marketable AAS degree and by being better

1. prepared to enter and complete the CVET-BS program.

3

4 *KRA-2: Maximize opportunities for innovation, creativity, research, and scholarship*

5

1. Students will have opportunities to explore global sustainability issues as they relate to the
2. built environment, such as infrastructure for water supply and energy networks. Students
3. will be introduced to the International Building Code (IBC) and “green” building materials and
4. systems.

10

11 KRA-3: Execute with organizational/operational excellence

12

1. The proposed CT program will undergo an intensive annual outcomes assessment review
2. with the objective of meeting RIT’s program effectiveness goals. Led by the chairperson,
3. the results of the review process will be discussed at annual department meetings and
4. reported to RIT’s Assessment Management System.

17

18 *KRA-4: Achieve the highest levels of stakeholder satisfaction*

19

1. The NTID Department of Engineering Studies conducts an annual Student Satisfaction
2. Survey as part of the University’s Outcomes Assessment Plan. The results of the survey will
3. be reviewed annually and reported along with data from the outcomes assessment review to
4. RIT’s Assessment Management System.

24

25 ***E. Describe curricular features that:***

26

27 facilitate and support student and faculty scholarship, research and creativity

28

1. The curriculum offers students several opportunities, particularly in lab-based courses, to
2. explore sustainable construction techniques. For instance, the Construction Materials &
3. Methods I course (NCAD-255) requires students to build components of a building’s wall
4. section. Students study a variety of building materials and their value towards sustainability. As
5. part of this activity, students will explore a number of non-traditional building materials.

34

35 address emerging disciplines

36

1. Students will be introduced to the pressing global issues related to sustainability and “green”
2. construction materials and methods. Ethical, as well as the technical aspects of sustainable
3. construction practices, will be explored.

40

1. ***F. Describe and list documented curricular interconnections and integration***
2. ***between this program and other disciplines, programs and colleges at the***
3. ***University***

44

1. The proposed CT program was developed with advisement of faculty from the CVET-BS
2. program. The CT and CVET-BS programs will coordinate closely to provide CT graduates with
3. a more effective transition to the baccalaureate program. The CT program will also utilize
4. existing resources with the Computer Aided Drafting Technology (CADT) program in DES. The
5. CT students will work along with CADT students in the three NTID technical courses.

50

51 ***G. Describe the role of faculty in the program’s design***

52

1. The proposed AAS in Civil Technology program was designed and proposed by the chairperson
2. and two faculty of the NTID Department of Engineering Studies along with consultation of the
3. present program coordinator of Civil Engineering Technology (CVET-BS), the baccalaureate
4. program offered by the College of Applied Science and Technology (CAST). The program
5. provides a programmatic alternative for deaf and hard of hearing students who need academic
6. preparation in order to succeed in the CVET-BS program in CAST. The two colleges (NTID and
7. CAST) aim to establish an articulation agreement with CVET-BS for the admission of AAS Civil
8. Technology graduates with junior-year status.

9

10 ***H. Describe the input by external partners***

11

1. Because this proposed program is essentially an internal transfer agreement between NTID and
2. CAST, there are no external partners involved.

14

15 ***I. Provide enrollment projections for Year 1 through Year 5***

16

1. Projections for program enrollment are based on the expectation that overall NTID enrollment
2. will continue at current levels of approximately 1,432 students. It is expected that an average of
3. 5 students will enroll in the AAS CT program per year over the next 5 years.

20

1. Enrollment projections for different subgroups of entering students are summarized below and
2. each subgroup is described in the narrative that follows.

23

24 **Student Projections for the AAS CT program**

"Traditional" Students "Newly

First Year

Second Year

NAPE DES AAS

Other NTID

Attracted" Students

# of Entering Students

# of Returning Students

Total Program

Enrollment

Year 1 1 1 1 0 3 0 3

Year 2 1 1 1 1 4 2 6

Year 3 0 2 1 2 5 3 8

Year 4 0 2 1 2 5 4 9

Year 5 0 2 1 2 5 4 9

25

26

1. Approximately ten students per year now enroll in the pre-baccalaureate engineering program
2. (PBENG) hoping to transfer into either the College of Engineering or the College of Applied
3. Science and Technology program. PBENG is a non-degree generalized preparation program
4. for transferring to baccalaureate engineering programs at RIT. The proposed AAS degree
5. program will provide students interested in the Civil Engineering Technology program a more
6. efficient route for entering the CVET-BS program.

33

1. On occasion, the proposed program would be appropriate for a “borderline” student who,
2. without the proposed AAS program, would be placed in a career preparatory DES program. In
3. the group of students who entered DES programs fall 2013, four (4) of 36 students had the math
4. and English profiles that would allow them to enter the CT program as proposed.

38

1. It is also anticipated that there will be an occasional “internal transfer” student entering the CT
2. program following a stay in another program at NTID. It is not atypical of many deaf students
3. who want a bachelor’s degree to transfer from one baccalaureate level program area to another
4. to achieve this goal.

43

1. The first three categories represent the three “traditional” types of students who will be served
2. by the proposed program. In addition, it is projected that the proposed AAS CT program will
3. appeal to students not presently attracted to NTID/RIT. In the table above, these students are
4. labeled "newly attracted" students.

5

6

7 **2. Program Courses and Schedule**

8

1. The proposed Civil Technology program offers a comprehensive curriculum of 65 total credit
2. hours taken over four semesters. Course experiences systematically address the preparatory
3. challenges that deaf and hard of hearing students face for successful entry into the CAST Civil
4. Engineering Technology program. The courses are designed to prepare them to succeed once
5. they have entered the CVET-BS program. The CT program includes three required NTID
6. technical courses totaling 9 credits. These three courses will be transferable to CAST as the
7. equivalent of five required technical courses totaling 9 credits. Liberal arts and sciences
8. components include 25 credits from NTID, College of Science, and the College of Liberal Arts.

17

18 **AAS Credit Summary**

19

20 Total of 65 credits, 22 courses, projected over four academic semesters

21

1. Technical Component = 36 credits / 12 courses
2. College of NTID = 9 credits / 3 courses
3. CAST & COS = 27 credits / 9 courses

25

26 Liberal Arts and Sciences Components = 25 credits / 8 courses

27

1. Other courses=4 credits / 2 courses
2. Elective = 3 credits / 1 course
3. Freshman Seminar = 1 credit / 1 course

31

32

1. ***A. List all required and elective courses in the program and show how a typical***
2. ***student would progress through the program.***

35

36 See Table 1a on the following page.

1 Table 1a: Undergraduate Program Schedule

2

3

**Civil Technology - AAS**

1.  Indicate academic calendar type: \_X\_Semester Quarter Trimester

Other (describe)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Term: Fall 1** | | | Check course classification (s) | | | | | |  |  | **Term: Spring 1** | | | | (Check course classification (s) | | | | |
| **Course Number & Title** | | CR | LAS | Maj | New | | Prerequisite(s) | |  |  | **Course Number & Title** | | | CR | LAS | | Maj | New | Prerequisite(s) |
| NCAD-150 Engineering Graphics in AEC | | 3 |  |  |  | | None | |  |  | NCAD-180 Civil Technology Graphics | | | 3 |  | |  |  | None |
| NCAD-255 Constr. Materials & Methods I | | 3 |  |  |  | | None | |  |  | UWRT-150 Writing Seminar (LAS-F2) | | | 3 |  | |  |  |  |
| First Year Seminar (LAS-F1) | | 3 |  |  |  | |  | |  |  | MATH-171 Calculus A | | | 3 |  | |  |  |  |
| LAS-Elective (NMTH-275 Advanced Math) | | 3 |  |  |  | |  | |  |  | PHYS-111 College Physics I w/ lab (LAS-P6) | | | 4 |  | |  |  |  |
|  | |
| Elective | | 3 |  |  |  | |  | |  |  | LAS-P1 (ethical) | | | 3 |  | |  |  |  |
| NCAR-100 Freshman Seminar | | 1 |  |  |  | |  | |  |  |  | | |  |  | |  |  |  |
| Term credit total: | | 16 | 6 | 6 |  |  | |  |  |  | Term credit total: | | | 16 | 10 | | 6 |  | |
| **Term: Fall 2** | | | Check course classification (s) | | | | | |  |  | **Term: Spring 2** | | | | (Check course classification (s) | | | | |
| **Course Number & Title** | | CR | LAS | Maj | New | | Prerequisite(s) | |  |  | **Course Number & Title** | | CR | | LAS | | Maj | New | Prerequisite(s) |
| CVET-160 Surveying | | 3 |  |  |  | | Co-requisite CVET-161 | |  |  | CVET-170 Elements of Building Construction | | 3 | |  | |  |  | None |
|  | |
| CVET-161 Surveying Lab | | 1 |  |  |  | | Co-requisite CVET-160 | |  |  | MCET-221 Strength of Materials | | 4 | |  | |  |  | MCET-220 |
| MCET-220 Principles of Statics | | 3 |  |  |  | | PHYS-111 | |  |  | CHMG-121 Chemical Princ. & Apps. | | 3 | |  | |  |  | None |
| MATH-172 Calculus B | | 3 |  |  |  | | MATH-171 | |  |  | LAS-P3 (global) | | 3 | |  | |  |  |  |
| PHYS-112 College Physics II w/ lab | | 4 |  |  |  | | PHYS-111 | |  |  | LAS-P4 (social) | | 3 | |  | |  |  |  |
| LAS-P2 (artistic) | | 3 |  |  |  | |  | |  |  |  | |  | |  | |  |  |  |
| Term credit total: | | 17 | 3 | 14 |  | | | |  |  | Term credit total: | | 16 | | 6 | | 10 |  | |
| **Program Totals:** | **Credits: 65** | | | | **Liberal Arts & Sciences: 25** | | | | | | | **Major: 36** | | | | **Elective & Other: 4** | | | |

1. **Cr:** credits **LAS:** liberal arts & sciences **Maj:** major requirement **New:** new course **Prerequisite(s):** list prerequisite(s) for the noted
2. courses

7

1. Notes:
2. If possible, students are encouraged to take the CVET courses in Statics (CVET-210) and Strength of Materials (CVET-220), rather than the MCET courses listed
3. above (MCET-220 & MCET-221) for the AAS degree. However, the CVET-BS program will accept the MCET courses as substitutes, as shown above.

11

1. The elective in the first semester is typically based on science, mathematics, or English placement. The course may include Critical Reading & Writing (UWRT-
2. 100), Concepts of College Physics (NSCI-270), or another course as determined by the department chairperson.

9

###### 1 B. Identify courses on Table 1a that satisfy RIT’s General Education Framework.

2

3 The following general education courses are part of Table 1a

4

1. 1. Foundation Courses
2. a. First Year Seminar (LAS Foundation 1)
3. b. UWRT-150 Writing Seminar (LAS Foundation 2)

8

9 2. Perspectives

1. a. LAS-P1 (ethical)
2. b. LAS-P2 (artistic)
3. c. LAS-P3 (global)
4. d. LAS-P4 (social)
5. e. PHYS-111 College Physics I w/ lab (LAS-P6, Scientific Principles)

15

1. 3. General Education Electives
2. a. NMTH-275 Advanced Math

18

19

1. ***C. For every required course provided by a department other than the***
2. ***program’s home department, provide a memo of support in Appendix C from***
3. ***that department***

23

24 See Appendix C for internal letters of support.

25

26

27 ***D. Non‐traditional schedule (e.g., off‐campus, on‐line, etc.)***

28

29 Not applicable. All of the courses will be offered on campus in classrooms or labs.

30

31

1. ***E. For existing courses that are part of the major, submit a copy of the current***
2. ***catalog description***

34

35 **College of National Technical Institute for the Deaf Courses**

36

1. **NTID-NCAD-150 Engineering Graphics in AEC**
2. The objective of this course is to introduce students to engineering graphics as a means of
3. communication in the technical fields of architecture, engineering and construction (A/E/C). The
4. course is laboratory oriented and provides the student with basic skills to create professional 2D
5. drawings. This comprehensive first course focuses on the use of AutoCAD software for
6. mechanical, architectural and civil drawings. The course assumes no prior knowledge of
7. engineering drawing or CAD. **Class 2 Lab 3, Credits 3 (F)**
8. **NTID-NCAD-180 Civil Technology Graphics**
9. The objective of this course is to develop an understanding of drawings and practices used in
10. the civil drafting field. Students engage in sketching exercises as well as use computer aided
11. drafting tools to create plans and drawings for civil engineering projects. Students are
12. introduced to mapping, surveying, GIS, plot plans, contour lines, highway layout, profiles and
13. earthwork drawings. Students develop an understanding of the technical and legal purpose of
14. these drawings and how to assemble them. No official prerequisites are required, but students
15. should have basic computer literacy skills. **Class 2, Lab 3, Credit 3 (S)**

9

1. **NTID-NCAD-255 Constr. Materials & Methods I**
2. Students study soil, aggregate, Portland cement concrete, asphalt cement concrete and wood
3. products used for construction. Laboratory work focuses on testing soil, aggregates and
4. Portland cement concrete. ASTM standards are used in all testing. Students also test mortar
5. using ASTM standards and follow building codes for framing construction. Students will engage
6. in hands-on lab activities. (NCAD-108, NCAD-170) **Class 2 Lab 3, Credit 3 (F)**

16

1. **NTID-NMTH-275 Advanced Math**
2. Topics from precalculus mathematics are studied with an emphasis on functions and graphs.
3. Topics include the algebra of functions and the study of inverse functions. Rational, exponential,
4. logarithmic and piecewise-defined functions are among those studied. Exploration of
5. mathematical concepts through the use of a graphing calculator is an integral feature of the
6. course. Students may not take both NMTH-260 and NMTH-275 for credit without permission of
7. the department. (0884-212 with a grade of C or better, or appropriate placement score) **Class 2,**
8. **Lab 2, Credit 3 (F, S)**

25

1. **NTID-NCAR-100 Freshman Seminar**
2. The course provides entering NTID students with opportunities to develop/enhance academic
3. skills, personal awareness, and community involvement in order to maximize their college
4. experience. Students have opportunities to explore and navigate the college environment,
5. develop/reinforce academic skills and participate in service learning opportunities. Students are
6. encouraged to establish meaningful connections with faculty, staff and peers. The course
7. promotes the development of plans for ongoing growth and involvement in class and in the
8. RIT/NTID and/or broader community. **Class 1, Lab 1, Credit 1 (F,S)**

34

35 **College of Applied Science and Technology Courses**

36

1. **CAST-CVET-160 Surveying**
2. Introduction to fundamentals of surveying. Topics include: note taking; differential leveling;
3. vertical and horizontal measurement; traversing; topographic mapping; horizontal, vertical,
4. compound and reverse curves; earthwork; and GPS/GIS. (Co-requisite CVET-161) **Class 3,**
5. **Credit 3, (F)**

42

1. **CAST-CVET-161 Surveying Laboratory**
2. Students apply the fundamentals of surveying to field exercises using modern surveying
3. equipment. Field exercises include differential leveling, cross sections, traversing, topographic
4. mapping, horizontal curve layout, vertical curve design, earthwork estimation, use of data
5. collectors, and GPS/GIS. (Co-requisite CVET-160) **Lab 2, Credit 1, (F)**

48

49

1. **CAST-CVET-170 Elements of Building Construction**
2. Elements and details of building construction, both residential and commercial, are explored.
3. The course does not focus on design, but rather on specific building components, and on how
4. these components work together to create a functional building. Some of the topics include:
5. foundations, wood light frame, heavy timber frame, steel, concrete, masonry, glass, roofing,
6. cladding systems, and interior finishes. The role of building codes in design and construction is
7. introduced. ‘Green’ building materials and systems are also introduced. **Class 3, Credit 3 (S)**

8

1. **CAST-MCET-220 Principles of Statics**
2. This course provides an introduction to the analysis and design of structures and machines.
3. Students learn to calculate unknown forces using the concept of equilibrium and free body
4. diagrams and to calculate simple stresses and deflections for axially loaded members. Topics
5. include forces, moments, free body diagrams, equilibrium, friction, stress, strain and deflection.
6. Examples are drawn from mechanical, manufacturing and civil engineering technology. (PHYS-
7. 111 with a grade of C or better) **Class 3, Rec 1, Credit 3 (F, S)**

16

1. **CAST-MCET-221 Strength of Materials**
2. This course provides an introduction to the analysis and design of structures and machines.
3. Students learn to calculate stresses and deflections in axially loaded members, beams, shafts
4. and columns. Topics include statically indeterminate problems, thermal stress, stress
5. concentration, combined stress by superposition and Mohr's Circle. Students also gain
6. experience with laboratory equipment, experimental methods, team work, project management
7. and communications as they complete laboratory and project assignments. (MCET- 220 with a
8. grade of C or better) **Class 4, Rec 1, Credit 4 (F, S)**

25

26 **College of Science Courses**

27

1. **COS-MATH-171 Calculus A**
2. This is the first course in a three-course sequence (MATH-171, MATH-172, MATH-173). This
3. course includes a study of functions, continuity, and differentiability. The study of functions
4. includes the definition, representations and the trigonometric functions. Limits of functions are
5. used to study continuity and differentiability. The study of the derivative includes the definition,
6. the basic rules including the chain rule, and implicit differentiation. Applications of the derivative
7. include problems in related rates and curve sketching. **Class 3, Workshop 2, Credit 3 (F, S)**

35

1. **COS-MATH-172 Calculus B**
2. This is the second course in three-course sequence (MATH-171, MATH-172, MATH-173). This
3. course includes L'Hospital's Rule, optimization, Riemann sums, the Fundamental Theorem of
4. Calculus, techniques of integration include substitution, integration by parts, and partial fractions.
5. The applications of the definite integral include areas between curves, volumes, arc length, and
6. average values of functions. (C or better in MATH-171 or 1016-171T) **Class 3,Workshop 2,**
7. **Credit 3 (F, S)**

43

1. **COS- PHYS-111 College Physics I**
2. This is an introductory course in algebra-based physics focusing on mechanics, waves, and
3. optics. Topics include kinematics, planar motion, Newton’s laws, gravitation; rotational
4. kinematics and dynamics; work and energy; momentum and impulse; conservation laws; fluids;
5. simple harmonic motion; mechanical and electromagnetic waves; geometrical optics; physical
6. optics and interference; data presentation/analysis and error propagation. The course is taught
7. using both traditional lectures and a workshop format that integrates material traditionally found
8. in separate lecture, recitation, and laboratory settings. (Competency in algebra, geometry and
9. trigonometry.) **Class 2, Workshop 4, Credit 4 (F, S, Su)**
10. **COS- PHYS-112 College Physics II**
11. This course is an introduction to algebra-based physics focusing on thermodynamics, electricity
12. and magnetism, and elementary topics in modern physics. Topics include heat and
13. temperature, laws of thermodynamics, electric and magnetic forces and fields, DC and AC
14. electrical circuits, electromagnetic induction, the concept of the photon, and the Bohr model of
15. the atom. The course is taught using both traditional lectures and a workshop format that
16. integrates material traditionally found in separate lecture, recitation, and laboratory settings.
17. (COS-PHYS-111). **Class 2, Workshop 4, Credit 4 (F, S, Su)**

9

1. **COS- CHMG-121 Chemical Principles & Applications**
2. This course is an introduction to basic concepts of chemistry, assuming limited prior experience.
3. Topics include the periodicity of the elements, chemical bonding, stoichiometry, solutions, and
4. states of matter. The laboratory component gives students experience with basic laboratory
5. techniques: gravimetric, volumetric, thermal and titration analyses, and use these techniques to
6. analyze chemical reactions. The lecture and lab are supported by workshop-style problem
7. sessions. Offered in traditional and online formats. **Class 2, Lab 3, Credit 3 (F, S, Su-online only)**

17

18 **College of Liberal Arts Courses**

19

1. **COLA- UWRT-150 Writing Seminar**
2. The Writing Seminar is a three-credit seminar limited to 19 students per section. The course is
3. designed to develop first-year students’ proficiency in analytical writing, rhetorical reading, and
4. critical thinking. Students will read, understand, and interpret a variety of texts representing
5. different cultural perspectives and/or academic disciplines. Academic, non-fiction texts, chosen
6. around a particular theme, are designed to challenge students intellectually and to stimulate
7. their writing for a variety of contexts and purposes. Through inquiry-based assignment
8. sequences, students will develop academic research and literacy practices that will be further
9. strengthened throughout their academic careers. Particular attention will be given to the writing
10. process, including an emphasis on teacher-student conferencing, self-assessment, class
11. discussion, peer review, formal and informal writing, research, and revision; small class size
12. promotes frequent student-instructor and student-student interaction. The course also
13. emphasizes the principles of intellectual property and academic honesty for both current
14. academic and future professional writing. **Class 3, Credit 3 (F, S, Su)**

34

35

36

37 ***F. For all new courses, provide course outlines***

38

39 There are no new or revised courses in this AAS proposal.

40

1 **3. Faculty**

2

1. All of the NTID technical courses are taught by NTID faculty who use direct instruction, including, but not limited to: sign language, spoken
2. language, printed/visual aids, web-based instructional materials, and individual tutoring. The remainder of the courses in the AAS program
3. will be taught by CAST, COS and COLA faculty. The mathematics and science general education courses will be taught by NTID and COS
4. faculty. Students taking courses taught by CAST, COS, or COLA faculty members may request educational access services which include
5. sign language interpretation, assistive listening systems, speech to text transcription and note taking.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Faculty Member Name and Title/Rank at Institution (include and identify Program Director) | Program Courses which may be Taught | Percent of Teaching Time for Program Courses | Highest and Other Applicable Earned Degrees and Disciplines (include College/University) | Additional Qualifications: list related certifications/ licenses; professional experience in field, scholarly contributions, other academic affiliations. |
| Laury, Dino  -Program Director  -Department Chair  -Assistant Professor |  | 0% | M.S., Information Technology, Rochester Institute of Technology | Doctoral Student, Warner School of Education, University of Rochester CompTIA® Network+TM Certified Professional |
| Fugate, James  -Assistant Professor | NCAD-150 Engineering Graphics in AEC NCAD-180 Civil Technology Graphics NCAD-255 Constr. Materials & Methods I | 50% | M.S., Information Technology, Rochester Institute of Technology | ADDA Certified Architectural Drafter Professional Certifications in Autodesk AutoCAD and Revit |
| LaVigne, William  -Assistant Professor | NCAD-150 Engineering Graphics in AEC NCAD-180 Civil Technology Graphics NCAD-255 Constr. Materials & Methods I | 33% | M.S., Instructional Technology, Rochester Institute of Technology | Registered Architect Member of the American Institute of Architects |
| Holmes, Marcus  -Senior Lecturer | NCAD-150 Engineering Graphics in AEC | 17% | M.S., Multidisciplinary Studies,  Rochester Institute of Technology | ADDA Certified Mechanical Drafter  SolidWorks Certification |

8

9 If needed, the department maintains a list of adjunct faculty available for the courses listed in the table above.

10

11 See Appendix F for faculty Curricula Vitae.

14

### 1 4. Financial Resources and Instructional Facilities

2

1. ***A. Summarize the instructional facilities and equipment needed to ensure the***
2. ***success of the program***

5

1. There are no new resource implications for this program. All of the technical courses are
2. existing courses within the CADTEC-AAS program or the CVET-BS program. If student
3. enrollment remains at projected levels, the CT program will use courses, faculty, equipment,
4. space and support services already available within RIT’s colleges. In the event that enrollment
5. increases to more than 15 students, the Engineering Studies department will seek additional
6. instructional and tutoring resources.

12

1. For more information on the new program cost model, see Appendix G. The cost model was
2. developed by Mr. Michael Serve, the Assistant Vice-President for NTID Finance and Budget.

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23 **5. Library Resources**

24

1. Because the program is an internal transfer program to a long-time existing program at CAST in
2. Civil Engineering Technology, the RIT library currently maintains resources available for
3. research in the field of civil engineering. Resources include journals, books, e-books, and
4. access to a variety of maps including USGS quad maps.

29

1. Please refer to a supporting letter from the NTID Education Librarian, Joan Naturale, in
2. Appendix C.

32

1 **6. Admissions and Enrollment**

2

3 ***A. List all program admissions requirements for the proposed program***

4

1. Applicants must meet the general requirements for acceptance to RIT through NTID as detailed
2. in RIT’s Undergraduate Bulletin. RIT and the U.S. Department of Education have agreed on
3. these standards.

8

1. Entry criteria into the AAS degree program in Civil Technology are based on the applicant’s
2. projected ability to complete graduation within a typical program mask timeline. Incoming first-
3. year NTID students pursuing this degree option will need to meet the following entry
4. requirements:

13

1.  ACT Composite Score of 18 (20 Math, 16 Reading) or higher; *and*,
2.  Liberal Arts Placement of UWRT-100 Critical Reading & Writing or higher; *and*,
3.  NTID Math placement at NMTH-275 Advanced Math or higher; *and*,
4.  After a single NTID science course, NSCI-270 Concepts of College Physics, be ready for
5. entry into PHYS-111, the COS College Physics I course.

19

1. Internal transfer students who are pursuing this degree option will need to meet the entry
2. requirements for this program as follows:

22

1.  Successful completion of Critical Reading & Writing (UWRT-100); *and*,
2.  Overall GPA in courses at NTID/RIT of 2.5 and higher; *and*,
3.  Successful completion of NTID NMTH-250 level mathematics course or higher; *and*,
4.  Successful completion of NTID NSCI-250 level science course or higher

27

28 ***B. Describe the process for evaluating exceptions to admission requirements***

29

1. Requiring at least an ACT composite score of 18 is consistent with published ACT “standards
2. for transition” suggesting that “16-19 (is the) minimum level of performance to enter credit-
3. bearing college courses” for transfer degree purposes. The typical students who satisfy the
4. math and English entrance requirements will be prepared to complete the AAS degree in two
5. years. The department chairperson will reserve the right to evaluate borderline applicants
6. through the normal NTID admission process.

36

1. ***C. How will the institution encourage enrollment by persons from groups***
2. ***historically described as underrepresented in the discipline or occupation?***

39

1. While limited to students who meet the RIT and NTID admissions criteria, this proposed AAS
2. transfer degree program is expected to enhance enrollment by attracting new and retaining
3. existing NTID students. The proposed course of study offers engineering minded students from
4. all demographics an attractive alternative program to qualify them for admission to the CVET-
5. BS major and subsequently graduate with a bachelor of science degree within two years of their
6. admission. This option has historically not been available to these students and has not been
7. marketed to prospective students. The NTID Admissions Office will recruit and admit deaf and
8. hard-of-hearing students both nationally and internationally. Recruitment practices and
9. procedures will be in accordance with those established by NTID and RIT.

49

1 **7. Academic Support Services**

2

1. The CT program will use a variety of approaches to advise and counsel its students. The DES
2. also has academic counselors assigned to work with the CT students from the NTID Counseling
3. Services. Presently, all programs within the DES employ the following strategies:

6

1.  Use the RIT “early alert” program on a semester basis. Identified students, their NTID
2. counselor, and the Chair are notified of potential academic challenges. Appropriate early
3. intervention strategies are then planned.

10

1.  Hold team meetings with students placed on probation or returning from suspension.
2. The Chair and counselor will conduct individual meetings with students to discuss
3. possible academic/social barriers, to determine solutions, and to establish performance
4. expectations.

15

1.  Discuss student concerns at a program meeting. NTID counselors of DES students
2. regularly attend program meetings. At DES program meetings, faculty use the first part
3. of the meeting to identify and to discuss typical “student concerns” such as attendance,
4. class participation, quality of work, and personal-social problems. Appropriate
5. intervention strategies are often discussed.

21

1. Additional strategies will be considered if students are not succeeding in courses and
2. transferring at the anticipated rate since these students have the goal of transferring to BS level
3. programs. Involving faculty or staff from the CAST Civil Engineering Technology program may
4. be appropriate.

26

1. In addition to academic advising, the DES will provide tutoring services for CT students taking
2. courses from the CVET-BS program and other colleges of RIT. Currently, adjunct faculty are
3. providing tutoring services remotely for students cross-registered in the CVET-BS program.
4. These tutoring services will also be available for the two years of this AAS program and the first
5. year of the CVET-BS program after transfer.

32

33

34

35 **8. External Review of Graduate Programs**

36

37 Not applicable for this AAS transfer degree program.

38

39

40

41 **9. Credit for Experience**

42

43 The CT program will not grant substantial credit for prior learning derived from experience.

44

1 **10. Program Assessment and Improvement**

2

1. The essential goal of the Civil Technology program is to prepare students for enrollment
2. in Civil Engineering Technology program. Students will gain fundamental skills and
3. knowledge related to Civil Engineering Technology. The curriculum is designed to foster
4. the development of both hard and soft skills that students will need to begin a successful
5. career.

8

1. The curriculum, along with the Program Level Outcomes Assessment Plan, was
2. designed to incorporate a broad and fundamental view of the civil engineering
3. technology field. The courses include instruction in computer aided engineering tools,
4. civil engineering graphics, construction materials and methods, surveying, statics,
5. strength of materials, and structures. The essential breadth and depth of content will
6. prepare students for entry into the CVET-BS program, which is ABET (Accreditation
7. Board for Engineering and Technology) accredited.

16

1. The CT program aligns with the RIT academic program profile by providing students with
2. knowledge and understanding of the following:

19

1.  Principles and practices of the civil engineering profession, where the outcomes
2. of technical literacy, ethical reasoning and global interconnectedness are
3. essential.

23

1.  Infrastructure planning and design that align well with the essential outcomes of
2. critical, creative and innovative thinking.

26

1.  The impacts of civil engineering solutions in a global and societal context where
2. outcomes of critical thinking, ethical reasoning, and integrative literacies are
3. fundamental to infrastructure improvements for society anywhere in the world.

30

1. See the table on the following page for the Outcomes Assessment Plan for the AAS in
2. Civil Technology. The chairperson of the NTID Department of Engineering Studies will
3. coordinate the assessment process. Data will be collected and discussed at yearly
4. departmental meetings. Results of outcomes assessment measures and the use of
5. results will be reported at the college level on a yearly basis and posted to RIT’s
6. Assessment Management System website at [www.rit.edu/academicaffairs/outcomes/.](http://www.rit.edu/academicaffairs/outcomes/)
7. The AAS program will be evaluated, annually, based on student success in meeting the
8. identified outcomes and consideration of emerging trends in liberal arts education.

39

1

1. Program Name/College:

**Program Level Outcomes Assessment Plan**

Civil Technology (CT) / National Technical Institute for the Deaf (NTID)

1. College Contact for Program Assessment: James Fugate (Program Assessment Coordinator) & Dino Laury (Department Chair)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **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** |
| Understand how to use productivity software to solve technical problems | Use CAD to produce 2D technical drawings | Critical Thinking Ethical Reasoning Integrative Literacies  Global Interconnectedness Creative/Innovative Thinking | Course: NCAD-150 Engineering Graphics  Final exam technical drawing  Scoring guide | 80% of students will score 75% or better on final exam grade using the scoring guide | Collection: Annually at the end of fall semester beginning AY 2014/2015  Spreadsheet for data collection | Data collected by Assessment Coordinator | Shared with program faculty, annual college summary report, NTID Annual Report, and RIT requested reports |
| Solve mathematical problems as related to technical drawings | Critical Thinking Ethical Reasoning Integrative Literacies  Global Interconnectedness Creative/Innovative Thinking | Course: NCAD-180 Civil Technology Graphics  Final exam technical problem solving | 80% of students will score 75% or better on final exam technical problem solving | Collection: Annually at the end of spring semester beginning AY 2014/2015 | Data collected by Assessment Coordinator | Shared with program faculty, annual college summary report, NTID Annual Report, and RIT requested reports |
| Develop a simple building model that communicates information for design and construction | Critical Thinking Ethical Reasoning Integrative Literacies  Global Interconnectedness Creative/Innovative Thinking | Course: NCAD-180 Civil Technology Graphics  Final CAD model project scoring guide | 80% of students will score 75% or better on final CAD model project using the scoring guide | Collection: Annually at the end of spring semester beginning AY 2014/2015 | Data collected by Assessment Coordinator | Shared with program faculty, annual college summary report, NTID Annual Report, and RIT requested reports |
| Prepare for entry to CAST Civil Engineering Technology program | Demonstrate competency in core technical courses needed to meet admissions requirements into CAST Civil Engineering Technology program | Critical Thinking Ethical Reasoning Integrative Literacies  Global Interconnectedness Creative/Innovative Thinking | Courses:NCAD-150 Engineering Graphics;  NCAD-255 Constr. Matls. and Meths.; NCAD-180 Civil Tech. Graphics  Course grades and Change of Program form | 75% of students completing the CT degree will achieve a grade of ‘C’ or better in all three core courses and be accepted into CAST CET program | Collection: Annually at the end of spring semester beginning AY 2015/2016 | Data collected by Assessment Coordinator | Shared with program faculty, annual college summary report, NTID Annual Report, and RIT requested reports |

1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Prepare for success in course work required in CAST Civil Engineering Technology program | Demonstrate competency in analysis of materials | Critical Thinking Ethical Reasoning Integrative Literacies  Global Interconnectedness Creative/Innovative Thinking | Course: MCET-221 Strength of Materials  Course grade | 75% of students will achieve a grade of ‘C’ or better | Collection: Annually at the end of spring semester beginning AY 2015/2016 | Data collected by Assessment Coordinator | Shared with program faculty, annual college summary report, NTID Annual Report, and RIT requested reports |
| Prepare for success in CAST BS  Civil Engineering Technology program | Earn BS degree in CAST Civil Engineering Technology program | Critical Thinking Ethical Reasoning Integrative Literacies  Global Interconnectedness Creative/Innovative Thinking | Graduation Rates | For CT graduates who enter CAST Civil Engineering Technology program, retention and graduation rates will not be significantly different than those of other transfer students | Collection: Annually at the end of spring semester beginning AY 2018/2019 | Data collected by Assessment Coordinator | Shared with program faculty, annual college summary report, NTID Annual Report, and RIT requested reports |
| Achieve student satisfaction with CT courses and program | Graduates of the CT program will indicate satisfaction with courses and program | Critical Thinking Ethical Reasoning Integrative Literacies  Global Interconnectedness Creative/Innovative  Thinking | Student satisfaction survey instrument | 75% of students graduating will indicate “satisfaction” with CT courses and the program on the Student satisfaction survey instrument | Collection: Annually at the end of spring semester beginning AY 2015/2016 | Data collected by Assessment Coordinator | Shared with program faculty, annual college summary report, NTID Annual Report, and RIT requested reports |

2

3

4

5

6 Note: Accreditation and external program review is not applicable for this AAS transfer degree program.

### 1 11. New/Emerging Field and Allied Health Areas

2

3 Not applicable for this AAS internal transfer degree program.

4

5

6

7 **12. Transfer to Baccalaureate Programs**

8

1. The AAS CT program prepares qualified NTID students for admission into the CVET-BS
2. baccalaureate program with junior-year status. Students who graduate from the proposed
3. program should be as well prepared as any student transferring to RIT with a two-year college
4. educational experience. Entry into other four-year engineering technology programs, either
5. within or outside RIT will be possible as well, although the number of courses accepted for
6. transfer may be less.

15

1. The proposed AAS requires a minimum of 65 credits of which 61 (94%) are transferable to
2. CVET-BS. The program can be contrasted with the CVET-BS program. For CT students, there
3. will be:

19

1.  Entry points to accommodate NTID English and Math to allow students to “catch up” to
2. other students accepted directly into CAST CVET-BS program.

22

1.  Three NTID course offerings in the CAD and construction materials areas which, as a
2. group, are structured to provide a foundation for deaf students in civil technology. These
3. three courses encompass the material and skill sets addressed in three courses taught
4. in the first three semesters of the CVET-BS program.

27

1.  Academic supports and accommodations inside and outside the classroom to increase
2. the effectiveness of instructional interventions and to bolster the quality and amount of
3. resources that can be made available for the success of the student.

31

1. The articulation agreement (see Appendix H) shows the required AAS courses and
2. demonstrates the transferability of them to the CVET-BS baccalaureate program.

34

35

36

37 **13. Application for Distance Education**

38

39 Not applicable for this AAS internal transfer degree program.

40

41

42

43

1 APPENDICES

2

1 **APPENDIX A ‐ New or Revised Course Outline Form**

2

3

4 There are no new or revised courses as part of this AAS internal transfer proposal.

5

1 **APPENDIX B ‐ Enrollment and Market Analysis**

2

3 ***A. Detailed enrollment projections for the next five years***

4

1. Projections for program enrollment are based on the expectation that overall NTID enrollment
2. will continue at current levels of approximately 1,432 students. It is expected that an average of
3. 5 students will enroll in the AAS CT program per year over the first 5 years of the program.
4. These students are projected to come from the following groups:

9

1.  Students directly admitted to NTID with an ACT score of 18 (20 Math, 16 Reading) who
2. are interested in Civil Engineering Technology

12

1.  Students currently enrolled in the DES Pre-Baccalaureate program (NAPE) hoping to
2. transfer into either the College of Engineering or a CAST program

15

1.  “Borderline” students who, without the proposed AAS program, would be placed in a
2. career preparatory Engineering Studies (ES) program

18

1.  “Internal transfer” students entering the CT program following a stay in another program
2. at NTID

21

1.  Students not presently attracted to NTID/RIT who would come because of the new
2. program

24

25

26 ***B. Anticipated graduation rate***

27

1. The overall NTID graduation rate historically has been 51 percent. The DES anticipates that the
2. proposed CT program will graduate a like percentage — at least. In fact, the DES believes that
3. the CT program could enhance the graduation rate because students will earn an AAS degree
4. upon completion of the CT program even if they do not complete the baccalaureate degree.

32

33 There are two caveats offered for any projection made:

34

1.  It could be anticipated that a number of students may transfer to the CAST CVET-BS
2. program before graduating from the CT program. This would not necessarily be an
3. undesirable occurrence. The benefits that would accrue to students enrolled in the
4. proposed program would occur largely in the first year. In the second year, students are
5. taking courses offered by CAST or other colleges, e.g., Liberal Arts.

40

1.  Some students may not complete the CT degree, instead choosing to transfer to a
2. career-focused AAS program within the Department of Engineering Studies. This, too, is
3. not an undesirable outcome, depending on the student and his or her circumstances.

44

45

1 ***C. Competing programs (regional and national)***

2

1. The CT curriculum is modeled after the first two years of CAST’s CVET-BS program. As such, it
2. not only has the potential to be an effective transfer program but will be efficient as well. The
3. only rival to the two-year program proposed will be the first two years in CAST’s CVET-BS
4. program. The proposed program has two kinds of advantages over the first two years of this
5. program.

8

1. First, the curriculum as proposed is designed to provide a supportive foundation optimizing the
2. success of deaf and hard-of-hearing students. Second, as is central to its mission, NTID has a
3. long history of providing deaf and hard-of-hearing students the support needed to succeed
4. academically. For courses offered at NTID, students can expect faculty who use sign language,
5. small classrooms and equipped labs. For courses offered through RIT colleges other than NTID,
6. NTID-supported students will have assigned faculty tutors. In addition, as NTID-supported
7. students, they will have available to them an extensive array of both academic and academic-
8. related support services. Finally, in contrast to any college in the country, except Gallaudet
9. University in Washington, D.C., students can experience an active vibrant deaf community
10. offering social, recreational and cultural opportunities both on and off campus.

19

1. Beyond RIT, the competing programs will typically be two-year transfer degree programs at
2. area community colleges. According to Mr. Scott Wolcott, the major feeder schools for CVET-
3. BS are Monroe C.C., Hudson Valley C.C., Canton SUNY, Broome C.C., Erie C.C. and Genesee
4. C.C. The proposed CT program will also have the same comparative advantages over these
5. feeder schools as the first two years of the CVET-BS program, as was mentioned previously.
6. NTID is an institution unlike any other institution in its mission to provide quality technical
7. education to deaf and hard-of-hearing students.

27

28

29 ***D. Anticipated geographic draw (regional, national and international)***

30

1. The NTID Admissions Office will recruit and admit deaf and hard-of-hearing students both
2. nationally and internationally. Recruitment practices and procedures will be in accordance with
3. those established by NTID and RIT.

34

35

1. ***E. Program delivery format (full‐time, part‐time, on‐site, off‐site, distance***
2. ***learning, weekend learning)***

38

1. This program will serve predominantly full-time students who will be on campus two semesters
2. each year.

41

42

1 **APPENDIX C ‐ Internal Letters of Support**

2

1. Jennifer Gravitz, Interim Chair NTID Department of Liberal Studies
2. Scott Hooker, Director of Admissions NTID Enrollment Management
3. Dino Laury, Department Chair NTID Department of Engineering Studies
4. Matt Lynn, Interim Chair NTID Department of Science & Mathematics
5. John Macko, Director NCE NTID Center of Employment
6. Joan Naturale, Deaf Education Librarian Wallace Library
7. Scott Wolcott, Program Chair CAST Civil Engineering Technology

10

**R·I·T** Rochester Institute of Technology

Nation al Tech nical Institute for the Deaf Department of Liberal Studies

Lyndon Baines Johnson Building 52 Lomb Memorial Drive Rochester, NY 14623-5604

585-475-6327 (V/TIY)

October 24, 2013

Fax 585-475-6500

RE: Proposed AAS Degree in Civil Technology

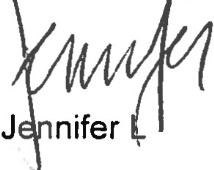
Dear Professor Fugate and Curriculum Committee Members:

As Chair of the NTID Department of Liberal Studies (DLS), I am pleased to offer my support of the proposed Civil Technology AAS degree program.

DLS offers an array of courses ranging from developmental English to Writing Semina r as well as LAS courses carrying the social, artistic, global and ethical perspectives . Students enrolled in the CT AAS program will find their required writing and LAS courses readily available to them and taught in American Sign Language by experienced, discipline based DLS faculty .

Mr. Laury's proposal for the AAS CT degree meets NTID's and RIT's stated missions by providing a direct and cost effect academic path for students to gain the requisite skills, and the AAS degree, to prepare them for admission to the CVET-BS baccalaureate program with junior year status .

I wholeheartedly endorse this proposed degree and urge the RIT Curriculum Committee to approve it.

e truly yG:: P

Cnair, NTID Department of Liberal Studies

**R·I·T Rochester Institute of Technology**

N11D Office of Admissions Lyndon Baines Johnson Hall 52 Lomb Memorial Drive Rochester, NY 14623-5604 585-475-6700

585-743-1366 {videoph one)

866-644-6843 (toll free)

October 9, 20 13

585-475-2696 (fax)

To Whom It M ay Concern:

I an1 writ ing to offer my fu ll support fi..lr the developmen t of a new AAS degree program in Civil Technology. I have read t he proposal and descri pt io11 of the program, and agree completel y that

t ht: creation of such a program is an excellent idea, and one that is essential for us to implement.

As is stated i n t he program goals, t he A AS i n Civi l Technology is an Associate+ Bachelor's degree program t hat prepares students to enter and successfully complete a baccalaureate program i n the College of Applied Science and Technology i n Civi l Engi neering Technology . sec the abi li ty for students to a11iculate from an NTI D program to a CVET-BS program as a needed opt ion for current students. and from a market i ng and recruitment perspecti ve, it is an

i m portant option for prospect i ve st udents, one that could very well hel p influe11cc thei r decision to enrol .

Based on marketi ng research, applica tion t rends, and admissions anecdotal i nformation, this program wi ll meet t he needs and he of i11terest of many of our prospecti ve and current students.

Please contact me i f you ha ve any quest ions regardi ng this letter of support. Sincere l y yours.

Gt ('/

Scott C. Hooker, Director

N TI D Office of Adm issions Rochester I nst i t ute of Technolog y

•

**Rochester Institute of Technology**



National Technical Institute for the Deaf Department of Engineering Studies Lyndon Baines Johnson Building

52 Lomb Memorial Drive Rochester, NY 14623-5604

585-475-6782 V/TDD Fax 585 475-6366

September 5, 2013

RE: Civil Technology Transfer Program (A+B)

Dear NTID Curriculum Committee,

In responses to the NTID's Strategic Vision 2010 and Strategic Decision 2020, this is the blueprint for curriculum growth and development . The Department of Engineering Studies Curriculum Development Team (Team: James Fugate, William LaVigne, Dino Laury) and DES Curriculum Committee (i.e.,the entire department) recommended the establishment of a Civil Technology - AAS degree transfer program.

Bachelors and Masters Degrees are fast becoming the degrees of choices for the deaf and hard-of­ hearing students and initial job placement at the professional level in an increasingly demanding marketplace. Moreover, the plan is to expand transfer degree programs that will better serve the higher achieving segment of NTID deaf and hard-of-hearing students because whose test scores upon entry to NTID are sound, but not quite sufficient, to quality for direct admission to RIT's baccalaureate programs than attending other schools. Perhaps one of the NTID's greatest strengths is its outstanding track record of assisting high-potential students who not only gain admission to, but to successfully graduate from the other colleges at RIT at rates comparable to or better than their hearing peers.

This development of the transfer degree program was a joi nt effort between CAST and NTID colleges at RIT and provided for a seamless transition into a bachelor degree in Civil Engineering Technology.

Ultimately, as a department chairperson, I would not hesitate to support this program's offerings. Sincerely,

Dino Laury, Chairperson

Department of Engineering Studies, NTID

**R·I·T** Rochester Institute of Technology

National Technical Institute for the Deaf Department of Science and Mathematics Lyndon Baines Johnson Building

52 Lomb Memorial Drive Rochester, NY 14623-5604

585-475-6478

October 24. 2013

To Whom I t May Concern ,

I fully suppo11the proposal to establish the AAS degree in civil technology at NTID. This program will include a number of math and science courses offered at NTID and by RIT's College of Science (COS). The one math course, Advanced Mathematics (NMTH 275). that is expl icit ly req uired by this ne\v program is offered every semester by my department and helps to prepare students for t ransfer into COS-level calcul us (e.g.• M ATH 1 71 : Calcul us A and MATH

I 72: Calcul us B). Students in the new civi l technology program may also elect to take a preparatory physics course, Concepts of College Physics (NSCI 270), that has recently been developed by my department in order to prepare themsel ves for COS-level physics (e.g., PH YS 11 I : Physics 1 and PH YS 1 12: Physics II).

Furt her, faculty in my department serve as tutors for NTI D-support ed students who are enrolled

i n COS math and science courses. Students in this civil technology program will therefore have access to tutors who have a graduate degree (M.S. or Ph .D.) in thei r area of expertise, who are also fl uent in A merican Sign Language, and who have experience working with deaf and hard ­ of-hearing students.

I n short, I feel t hat the proposed AAS degree i n civil technology is well-designed and students in t his program will be trai ned and supported by my department in a n um ber of ways .

Sincerely,

Matt hew A. Lynn, Ph.D.

I nteri m Chai rman and Associate Professor of Chemistry

Rochester Institute of Technology

**R·I·T**

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October 15, 2013

Mr. James Fugate

RIT/NTID Engineering Studies Department

Dear Mr. Fugate:

National Technical Institute for the Deaf

Center on Em ployment 52 Lomb Memorial Drive

Rochester, NY 14623-5604

585-475-6219

585-475-7570 fax

[www.rit.edu/ntid/coops/jobs](http://www.rit.edu/ntid/coops/jobs)

The NTID Center on Employment (NCE) is in full agreement with the proposed establishment of a new AAS Transfer degree program for the Civil Technology program, allowing qualified students to transfer to the CAST Civil Engineering Technology Bachelor's program.

The establishment of this transfer degree program is consistent with what the architecture, engineering, and construction industries are seeking, ie, employees from two/four years degree programs in Civil Engineering Technology. In addition, as you know, we are finding that more students considering NTID for their college degree are expecting to initially graduate with a BS degree. With a certain percentage of these students not fully academically ready for the BS level, transfer degree programs allow them to strengthen their skills and knowledge in areas to improve and be prepared in two years to move into the BS degree programs.

NCE has continuously developed good working relationships with faculty from the Engineering Studies department , so we are fully prepared to help the transfer students as they complete the AAS transfer degree and work with them as they enter their BS program.

We look forward to working with the Engineering Studies department and this new transfer degree program!

*g*Sinc*t*erely,

Mr. John Macko Director, NCE



Memorandum

TO: Dino Laury, Chair, Department of Engineering Studies, NTID

James Fugate, Instructor, Department of Engineering Studies, NTID

CC: Shirley Bower, Director, RIT Libraries

Sheila Smokey, Manager, RIT Libraries Acquisitions & Serials FROM: Joan Naturale, NTID Librarian, RIT Libraries

DATE: October 8, 2013

RE: Library support for proposed AAS degree in Civil Engineering

The following outlines the impact of NTID’s Department of Engineering Studies proposed AAS in Civil Engineering program.

This program will have a minimal impact on the library’s services and collection of books, journals, and databases.

RIT Libraries now use a demand/user driven model of acquisition for the majority of its book purchases ensuring books purchased are those that users want.

Our current holdings (journals and databases) are at acceptable levels for associates, bachelors and masters level programs. This is based on requests for books not published yet and new journal titles from an anticipated number of 4 faculty, and 5 AAS students.

The AAS degree in Civil Engineering will certainly benefit from resources already purchased to specifically support engineering such as ASCE Civil Engineering Database, ASM Handbooks, Ebrary, IEEE Xplore, Web of Science, and the SPIE Digital Library to name a few.

Requested journal articles and books not owned by the Wallace Library will be obtained on a timely basis though the library’s interlibrary loan and document delivery services (IDS) and ConnectNY.

The Wallace library is a member of the Rochester Regional Library Council (RRLC), which provides RIT undergraduate/graduate students, researchers, and faculty access to materials at other Monroe County libraries, using free RRLC Library access cards.

At this time, no additional budget amount is requested in support of this program.

**ROCHESTER INSTITUTE OF TECHNOLOGY**



N

College of Applied Science and Technology Department of Civil Engineering Technology, Environmental Management and Safety

T

78 Lomb Memorial Drive, Rochester, NY 14623-5603 Office: (585) 475-7213 Fax: (585) 475-7964

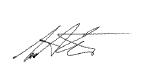
October 10, 2013

Dear NTID Curriculum Committee:

I am the chair of the Civil Engineering Technology (CET) program in the College of Applied Science and Technology (CAST). The purpose of this letter is to inform you that I have reviewed the proposed Civil Technology Transfer Program that was developed by Jim Fugate and Dino Laury from the Department of Engineering Studies at NTID. I am in full support of the proposal, and I believe it will be an excellent means to serve the deaf and hard-of-hearing students who are interested in CET. As was mentioned in the proposal, there continues to be a growing interest in civil engineering in the deaf and hard-of-hearing community. I believe that many of these students will greatly benefit from having the full support of this NTID program during their first two years.

I look forward to continue working with Jim and Dino as they implement their proposed transfer program. If you have any questions or need further comment, please do not hesitate to contact me at 475-6647 or [sbwite@rit.edu](mailto:sbwite@rit.edu)

Sincerely,



Scott Wolcott, P.E. Professor

CET Program Chair

### 1 APPENDIX D ‐ Program Need and Marketability

2

1. The purpose of the AAS degree in Civil Technology is to qualify NTID students for admission
2. into the CVET-BS baccalaureate program with junior-year status. The proposed AAS in Civil
3. Technology program provides a programmatic alternative for deaf and hard of hearing students
4. who need academic preparation in order to succeed in the CVET-BS program in CAST. This
5. proposal was developed in consultation with the program coordinator of the CVET-BS program,
6. Scott Wolcott.

9

10 **1. Employment outlook for civil engineering technology graduates**:

11

1. The nation’s infrastructure continues to age, and the maintenance and upgrading of the
2. infrastructure will create a growing demand for civil engineers. They will be needed to
3. manage projects to rebuild bridges, repair roads, and upgrade levees and dams. The
4. country’s growing population will place a higher demand on a potable water supply and
5. waste treatment plants. The growing population will also place a greater usage of the
6. nation’s transportation network of roads, bridges, tunnels, airports, and harbors. Civil
7. engineers play an important role in all of this work.1

19

1. *The Occupational Outlook Handbook* (Bureau of Labor Statistics) shows evidence of a
2. steady or growing demand for graduates of civil engineering programs. Employment of civil
3. engineers is expected to grow 19 percent from 2010 to 2020, slightly faster than average for
4. all occupations (14 percent). Job openings for civil engineers are expected to be numerous
5. through 2020.2

25

26 **2. Program Demand and Fit with Student Skills**

27

1. The demand for civil engineering appears to be strong. According to data retrieved from the
2. NTID Student Records/Registrar Officer, Rhonda Sliker, 45 deaf and hard-of-hearing
3. students have matriculated into CVET-BS since 2005, and 11 students graduated during the
4. same time period. Currently, 14 deaf and hard-of-hearing students are matriculated in
5. CVET-BS, including 6 students who graduated from the CADT program at NTID. The six
6. students who began their college education at NTID had an average ACT score of 15. The
7. remaining students who were directly admitted to CVET-BS have an average ACT score of
8. 24.75. Furthermore, of the 11 students who graduated since 2005, 4 had an average ACT
9. score of 17 (4 were transfer students, 2 had average ACT scores of 26 and 1 had an SAT
10. score of 1100). This data lends confidence to the proposed requirement of an ACT
11. composite score of 18 for entry to the CT AAS program.

39

1. Additional data retrieved from the NTID Admissions Department also shows an increasing
2. interest in civil engineering. In 2006, 22 prospective students contacted NTID with a specific
3. interest in civil engineering. In 2007, this number increased to 27, and in both 2008 and
4. 2009 the number of prospective civil engineering students increased to 32. For the years
5. 2009 to 2012, 33 enrolled deaf and hard-of-hearing students selected civil engineering as

1 “What Civil Engineers Do,” U.S. Bureau of Labor Statistics (BLS), *Occupational Outlook Handbook (OOH)*, Updated March 29, 2012 (web), accessed May 30, 2012 [<http://www.bls.gov/ooh/archi](http://www.bls.gov/ooh/architecture-)t[ecture-](http://www.bls.gov/ooh/architecture-) and-engineering/civil-engineers.htm#tab-2>

2 “Job Outlook,” U.S. Bureau of Labor Statistics (BLS), *Occupational Outlook Handbook (OOH)*, Updated

March 29, 2012 (web), accessed May 30, 2012 [<http://www.bls.gov/ooh/archite](http://www.bls.gov/ooh/architecture-and-)c[ture-and-](http://www.bls.gov/ooh/architecture-and-) engineering/civil-engineers.htm#tab-2>

1. their preferred major. Clearly, there is a growing interest in civil engineering studies among
2. prospective deaf and hard-of-hearing students.

3

4 **3. RIT Rationale for the Program**

5

1. RIT values NTID students and looks to them to make unique and innovative contributions to
2. RIT’s academic community. President Destler, in his 2009 Address to the Institute, states
3. that “NTID is one of the crown jewels of RIT, and we must do all we can to take advantage
4. of opportunities that the presence of this college on our campus provides”.

10

1. In turn, NTID is committed to recruiting and preparing its students to meet Dr. Destler’s
2. expectations. The NTID Strategic Decisions 2020 (SD 2020) states as one of the institute’s
3. primary strategies the expansion of 2+2/2+3 transfer degree programs, “particularly in
4. partnership with those colleges of RIT where such programs do not yet exist.” The SD
5. 2020 also targets an enrollment of 255 deaf and hard-of-hearing students in the
6. associate+bachelor’s programs by the year 2020. For the academic year 2011, NTID had
7. 204 students enrolled in associate+bachelor’s programs. An enrollment increase of 25
8. percent is needed to meet the targets set by SD 2020.

19

1. By joining the array of NTID AS and AAS programs that match the curriculum structure of
2. other RIT colleges, the AAS degree in Civil Technology will provide a seamless transition for
3. students to obtain a CVET-BS baccalaureate degree, with a minimal loss of credits.

23

24 **4. Graduate marketability**

25

1. While the purpose of the CT program is to provide a transfer avenue to an established
2. baccalaureate program at RIT, graduates will be best qualified to seek employment within
3. the civil engineering technology field. The Bureau of Labor Statistics (BLS) characterizes the
4. training and educational qualifications for positions within the civil engineering technology
5. field (which includes civil engineering technicians) as:

31

1. *Employers generally want engineering technicians*
2. *to have an associate’s degree from an ABET-*
3. *accredited program, although the degree is not*
4. *always required. Engineering technology programs*
5. *are also available at technical or vocational schools*
6. *that award a postgraduate certificate or diploma.*

38

1. *Courses at technical or vocational schools may*
2. *include engineering, design, and computer*
3. *software. To complete an associate’s degree in civil*
4. *engineering technology, students also usually need*
5. *to take other courses in liberal arts and the*
6. *sciences.3*

45

1. Even though some graduates of the CT AAS program may have currency in the job market, it is
2. not the intent of the program to serve students in this way. Students will not be encouraged to

3 “How to Become a Civil Engineering Technician,” U.S. Bureau of Labor Statistics (BLS), *Occupational Outlook Handbook (OOH)*, Updated March 29, 2012 (web), accessed May 30, 2012

[<http://www.bls.gov/ooh/architecture-and-engineering/civil-engineering-technicians.htm#tab-4>](http://www.bls.gov/ooh/architecture-and-engineering/civil-engineering-technicians.htm#tab-4)

1. enter the program for this purpose and will be encouraged to complete the AAS requirements
2. before attempting to transfer to the CAST program in Civil Engineering Technology that the CT
3. program is targeting.

4

1. However, if a student completes the CT program but does not complete the bachelor’s degree
2. program, he/she will still have earned an AAS degree. According to Scott Wolcott, the program
3. coordinator of the CVET-BS program, the proposed CT program provides students with an
4. “excellent stopping point for people who feel they need training, but aren’t quite ready for a 4
5. year experience. They can always build off the AAS at a later time.” (Wolcott, 1/25/2013 via
6. email) Some typical jobs that AAS graduates may seek include CAD draftsman, field
7. technician, survey assistant, construction inspector, assistant construction (project) manager,
8. and estimator.

13

1. The BLS projects that the number of civil engineering technicians will increase to 88,500 by
2. 2020. The increase of 12 percent is within the range of growth that BLS describes as “grow
3. about as fast as average.” Given that the CAST Civil Engineering Technology program is an
4. established five-year program and enjoys a fine reputation with stable enrollments, we expect
5. that CT graduates who go on to graduate from the CAST CVET-BS program will be in a strong
6. position to secure employment upon leaving RIT.

20

1

2 **APPENDIX E ‐ Space Allocation/Renovation Request**

3

1. The proposed AAS CT internal transfer program will not require any additional space or
2. renovation. The three NTID technical courses required for this program, including
3. Engineering Graphics in AEC, Construction Materials and Methods I, and Civil Technology
4. Graphics, are courses currently required for the Computer Aided Drafting Technology
5. (CADT) students. Engineering Graphics in AEC is also available as an elective for any
6. NTID student.

10

1. In addition, CT students will have access to the labs, equipment and software currently
2. dedicated to the CADT program in the NTID Department of Engineering Studies.

13

14

1 **APPENDIX F ‐ Faculty Curricula Vitae**

2

3 On the following pages are Curricula Vitae for the following faculty:

4

1. James R. Fugate
2. Marcus Holmes
3. Dino J. Laury
4. William R. LaVigne

9

James R. Fugate

Curriculum Vitae October 10, 2013

Computer Aided Drafting Technology ● Department of Engineering Studies National Technical Institute for the Deaf ● Rochester Institute of Technology Room LBJ-2759 ● 52 Lomb Memorial Drive ● Rochester, New York 14623-5604 Office: (585) 475-5687 ● Fax: (585) 475-6366 ● E-mail: [jrfnct@rit.edu](mailto:jrfnct@rit.edu)

SECTION 1: ACADEMIC AND PROFESSIONAL QUALIFICATIONS

**EDUCATION**

M.S., Information Technology, June 2006, Rochester Institute of Technology,

4.0 GPA

Concentrations: Web Site and Multimedia Development

Master’s Project: ***Computer Aided Drafting Technology Website: Discovering Accessibility for the Deaf and Hard- of-Hearing***

B.A., Urban Studies & Planning, August 1990, University of Maryland,

3.3 GPA

Concentration: Urban Design

A.A.S., Computer Information Systems, May 2000, Monroe Community College,

4.0 GPA

* + 1. ., Architecture Technology, May 1987, National Technical Institute for the Deaf,

3.6 GPA

**RESEARCH INTERESTS**

* + - * Computer Technology in the Architecture/Engineering/Construction (A/E/C) industry with a focus on Computer Aided Drafting (CAD)
      * Building Information Modeling (BIM)
      * Geographic Information Systems (GIS)
      * Construction Materials and Methods.

**PROFESSIONAL EXPERIENCE**

1/2001 – 10/2007 **Instructor**, Computer Aided Drafting Technology

1/2009 – present Department of Engineering Studies (formerly Department of Industrial Science and Technology)

National Technical Institute for the Deaf Rochester Institute of Technology (Rochester, NY)

*Responsibilities included developing curriculum and teaching courses within the CADT program and the Department of Engineering Studies (DES).*

11/2007 – present **Department Coordinator (50%) & Instructor (50%)**, Department of Engineering Studies

National Technical Institute for the Deaf Rochester Institute of Technology (Rochester, NY)

*As department coordinator, responsibilities include but not limited to coordinating curriculum efforts, course scheduling, faculty assignments, reporting program outcome assessments, compiling equipment requests, updating catalog/promotional materials and serving as co- op coordinator. As instructor, responsibilities include curriculum development and providing instruction for courses within the Computer Aided Drafting Technology (CADT) program as well as common Engineering Studies courses.*

3/2010 – present **Adjunct Instructor**, Interior Design School of Design

College of Imaging Arts and Sciences (CIAS) Rochester Institute of Technology (Rochester, NY)

*Responsibilities included developing and teaching courses in architectural and interior design manual drafting, as well as CAD and visualization using Autodesk Revit and AutoCAD.*

6/1987 – 8/1988 & **Architecture Technician**

9/1990 – 12/2000 DeWolff Partnership Architects (Rochester, NY)

*Responsibilities included construction document production, project coordination, managing and maintaining computers, customizing and writing computer programs, and providing training in CAD and other software.*

8/1999 – 1/2000 **CAD Technician**

Konopka Architecture PC (Rochester, NY)

*Provided CAD consulting services for a large addition and renovation project at the Brockport Central School District. Responsibilities included developing drawings for asbestos*

*abatement, window details, interior details, door and room finish schedules, exterior elevations and floor plans.*

5/2000 – 6/2000 **CAD Technician**

Vlada Simovic, A.I.A. (Honeoye Falls, NY)

*Provided CAD consulting services for a project at Gray Metal Products in Avon, NY. Responsibilities included developing a CAD database of the company’s existing facility.*

**ADDITIONAL EXPERIENCE**

4/2000 – 6/2000 **Tutor**

Byron-Bergen Central School District (Bergen, NY)

*Provided tutoring services, in U.S. history, to an eleventh grade special-ed student in preparation for the modified New York State Regents’ Exam.*

1/1991 – 3/1997 **Business Owner**

Music on the Move, LLC (Rochester, NY)

*Partnered with Diane Habeeb in a start-up business, which provided music instruction in students’ homes. Primary responsibilities included bookkeeping, billing, tax reporting, recruiting teachers, advertising, sponsoring recitals and providing music lessons.*

9/1988 – 5/1990 **Music Instructor**

Gallaudet University (Washington, DC)

*Taught an Introduction to Music course for two semesters, led an ensemble of hearing-impaired musicians, and assisted in writing proposals for grants.*

9/1988 – 8/1990 **Music Instructor**

Traveling Teachers (Silver Spring, MD)

*Traveled to students’ homes and taught private piano lessons.*

6/1986 – 8/1986 **Technician (Co-op)**

Fact Technical Services, Inc. (Rochester, NY)

*Responsibilities included collecting concrete samples, performing a series of tests, and preparing reports.*

**CERTIFICATION**

12/2012 *AutoCAD 2013 Certified Professional*

Autodesk

12/2012 *Revit Architecture 2013 Certified Professional*

Autodesk

4/2008 *Certified Architectural Drafter*

American Design Drafting Association (ADDA)

**AWARDS**

5/2005 *NTID Academic Achievement Award*

National Technical Institute for the Deaf

5/2005 *Drama Club Trooper Award*

National Technical Institute for the Deaf

**COMMUNICATION**

Sign Language Proficiency Interview (SLPI) Rating: **Advanced**

*Formerly Sign Communication Proficiency Interview (SCPI)*

Faculty/Staff Sign Language Education Program (FSSLEP) Courses Completed: 20131 ASL Conversation (H. Miller)

20123 ASL at Lunch (J. Behm)

20063 Classroom Sign Language Assessment (L. Boling) 20053 540-01 ASL for DPG (L. Boling), Grade: P (pass) 20043 Classroom Sign Language Assessment (J. Reeves)

20032 215-01 Spatial Referencing (J. Reeves), Grade: E (excellent) 20032 540-01 ASL for DPG (B. Holcomb), Grade: G (good)

20012 235-01 Fingerspelling (C. Poulet), Grade: E

20004 240-01 Receptive Practice (C. Campbell), Grade: E 20003-205-01 Sign Production (B. Khalsa), Grade: E 20003-215-01 Spatial Referencing (J. Reeves), Grade: E

Spoken Communication Workshops Attended: See Appendix A Additional Communication Workshops Attended: See Appendix A

**Marcus Holmes**

3261 White Pine Lane Macedon , New York 14502 (315) 986-8894

Email: [mthnts@rit.edu](mailto:mthnts@rit.edu)

EDUCATION:

Rochester Institute of Technology: Rochester, NY. June 2006 Masters of Science in Multidisciplinary Disciplinary Professional Studies Concentrations:

* Mechanical & Manufacturing Engineering Technology
* Instructional Technology
* Business Management

Rochester Institute of Technology: Rochester, NY.

Bachelor of Science in Mechanical Engineering Technology

May 1999

Rochester Institute of Technology: Rochester, NY.

Associate of Applied Science in Industrial Drafting Technology

August 1996

COURSES TAUGHT:

* Computer Aided Drafting I & II
* Manufacturing CAD I & II
* Basic Drafting I
* Mechanical Components
* Introduction to Material's Processes
* CADT Seminar
* Manufacturing Measurement Systems
* ST: Intro. To Engineering I & II
* Freshmen Seminar
* Precision Measurement
* Engineering Fundamentals in ET
* Computing Tools for ET
* CAD Applications in ET
* Blueprint Reading I & JI
* Design, Dimensioning & Toi.
* Construction CAD J & IJ
* ST: Engineering Graphics
* Internet CAD Applications

COMPUTER SKILLS:

SolidWorks , AutoCAD, Revit Architecture , Microstation , Master CAM, Adobe Design Premium CS4, and MS Office (Excel , Word , PowerPoint)

\*SolidWorks Certification (CSWA)

\*American Design Drafting Association Certification (Mechanical)

June 201 1

April 2008

EMPLOYMENT EXPERIENCE:

National Technical Institute for the Deaf Rochester, NY

Senior Lecturer in Engineering Studies Dept. September 2002 - Present

* Prepared and taught engineering courses with the use of good communication protocol .
* Implemented a classroom curriculum plan .
* Assisted the institute with quarter to semester conversion .
* Used myCourses to keep students informed of assignments and grades.
* Used the early alert "Starfish" to communicate with students regarding their course progress .
* Provided leadershi p to the students.
* Tutored associate and associate + bachelor students.
* Provided accommodation to students with special needs.
* Attended professional development workshops, department meetings , and variety of other meetings .

.."'

* + Participated in the Outreach programs; Steps to Success, Explore Your Future, Summer Vestibule Program, Tech Boyz and Tech girlz

**The Gleason Works Rochester, NY**

Drafter-Technician September 2000 - March 2002

* + Planned mechanical detail and assembly drawings of tooling eq uipment after reviewing sketches, descriptions, specifications and supporting documents using Microstation; confer with engineers and machinists.
  + Updated layouts and detail drawings according to engineering changes and initiated change orders.
  + Calculated dimensions and specified standard allowances in accordance with established procedures when detail is sectionalized, or dimensions and allowances are not stated on layouts.
  + Converted drawings to various formats such as dwg, dxf, and igs.
  + Assisted manufacturing engineers with the design process before production.

**The Gleason Works Rochester, NY**

Detailer Contract, April 2000 - September 2000

* + Designed various tooling equipments from customer's sketches utilizing Microstation.
  + Prepared scale detail drawings of bevel tooling equipment design and layout from drawings prepared by engineer.
  + Prepared drawings as dwg, dxf and iges files on disk for documentation purposes.

**The Gleason Works Rochester, NY**

Detailer Co-op, March - August 1997 and June - A ugust 1998

* + Prepared details for cylindrical tooling layouts and designed tooling equipment from customer's sketches.
  + Revised drawings to fit customer's specification.
  + Investigated and researched customer's specifications for required parts and drew CNC arbor tooling equipments utilizing Microstation.

**Harris Corporation, RF Communications Division Rochester, NY**

Detailer Co-op, June - August 1995 and J une - August 1996

* + Created mechanical detail drawings utilizing AutoCAD.
  + Prepared bill of materials, created and updated engineering change notices.
  + Generated drawings such as Schematics, Block Diagrams, Printed Circuit Boards.

**EXTRACURRICLUAR**

**ACTIVITIES:** • Co-Program Coordinator/Advisor for NTID Diversity Group. 201 1-present

* + Participated in the Autodesk Revit Structure training 2013
  + Participated in the Geometric Dimensioning & Tolerancing training 2012-2013
  + Advisor to assist students to implement the Engineering Club. 2011-2012
  + NTID Curriculum Committee (At-Large Alternate) 2009
  + Search Committee for Engineering Studies Dept. 2007-2008
  + Award of Excellence Committee at NTID 2007
  + Capstone Committee at NTID, 2006-2007
  + Middle State Subcommittee at NTID/RIT, 2005-2006
  + Rochester Black Deaf Advocate Officer & Board member: September 2003-2005.

**REFERENCES:** Provided upon request.

**Dino J. Laury Curriculum Vitae**

Office Address:

National Technical Institute for the Deaf Rochester Institute of Technology

LBJ Hall - 2771

52 Lomb Memorial Drive Rochester, NY 14623 Email: [**djlnet@rit.edu**](mailto:djlnet@rit.edu)

Phone: 585-286-4316 (Video Phone) Fax: 585-475-6366

Home Address: 227 Chelsea Meadows Drive West Henrietta, NY 14586 Email: [**dinolaury@gmail.com**](mailto:dinolaury@gmail.com)Video Phone: 585-444-1038

1. **ACADEMIC AND PROFESSIONAL QUALIFICATIONS**
   1. **EDUCATION**

**ion Technology**

|  |  |  |  |
| --- | --- | --- | --- |
| **Institution** | **Degree** | **Date** | **Major** |
| **Rochester Institute of Technology MS 2000 Informat**  Laury, D. (2000). *LAN-Based Intranet:* | | | |
| **Rochester Institute of Technology BS 1991 Mechani** | | | |
| **National Technical Institute for the Deaf AAS 1987 Industria** | | | |

*Desktop Video Conferencing*.

**cal Engineering Technology**

**l Drafting Technology**

* 1. **EMPLOYMENT HISTORY**

|  |  |
| --- | --- |
| Appointed Department Chairperson, NTID Engineering Studies | 10/2010 – Present |
| Appointed Interim Department Chairperson, NTID Engineering Studies 9/2007 – 10/2010 | |
| Instructional Faculty, NTID ICS & DES Coordinator 5/2006 – 9/2007 | |
| Instructional Faculty, NTID ICS 7/1999 – 5/2006 | |
| Instructional Faculty, NTID ACT & IDT 8/1998 – 7/1999 | |
| Lecturer, NTID/CTS/IDT 3/1994 – 8/1998 | |
| Visiting Instructor, NTID/CTS/IDT 12/1993 – 3/1994 | |
| *Mechanical Designer II, Galson Corp / Xerox 10/1992 – 12/1993* | |
| *Detail Designer, K&H Precision Products 5/1992 – 7/1992* | |
| *Mechanical Designer I, Galson Corp / Xerox 1/1991 – 5/ 1992* | |
| *Tutor & Notetaker, RIT City Center, AutoCAD 12/1990 – 5/1991* | |
| *Facilities CAD Draftsperson, Galson Corp / Xerox (COOP) 8/1989 – 11/1989* | |
| *CAD Draftsperson, MDT/CASTLE (COOP) 5/1988 – 8/1988* | |
| *CAD Draftsperson, General Electric (COOP) 6/1986 – 8/1986* | |

* 1. **HONORS and AWARDS**
     1. Granted **Tenured**, September 2003;
     2. Granted Promotion, **Assistant Professor**, September 2002;

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* + 1. “Who’s Who among America Teachers” Award, March 13 2002, ID No. 0579366 702 0 02806.
  1. **CERTIFICATIONS**

TM

* + 1. CompTIA® Network+

Certified Professional, September 21 2002,

ID No. COMP10564567

* + 1. Rated as Superior in Sign Communication Proficiency Interview (SPCI), February 8, 1999.
  1. **SCHOLARSHIP**

**GRANTS:**

Vocational and Technical Education Act (VATEA II, Perkins IV), *Computer Integrated Machining Technology Training and Curriculum Development II*. Laury, D. Major Effort PI, September 2011. Grant: $17,517.

Vocational and Technical Education Act (VATEA, Perkins IV), *Computer Integrated Machining Technology Training and Curriculum Development*. Laury, D. Major Effort PI, May 2010. Grant: $9,681.

Provost’s learning Innovations Grant, *Development of Experiential Activities on the Toyota Lab for NTID’s Deaf and Hard-of-Hearing Student Population*. Carrano, A., PI, Laury, D. Co-PI; May, 2010, Grant: $10,008.

Dodge Grant, *Dynamic Keyboarding*. (Phase 1 of 3), Slack, G., PI, Laury, D. Co-PI; September 2010, Grant: $1000.

**PUBLICATIONS:**

Laury, D. (2012). *Junior Faculty Administrator’s Innovation Strategies in Handling Collegiality Issues*. The Department Chairperson’s Newsletter, John Wiley & Sons, San Francisco Ca., Spring Issue, DOI:10.1002/dch.20046.

Laury, D. (2012). *Junior Faculty Administrator’s Innovation Strategies in Handling Collegiality Issues*. Academic Chairperson Conference Proceedings, Orlando, Fla. February 9-10, 2012.

**PRESENTATIONS:**

Laury, D. (2012). *Junior Faculty Administrator’s Innovation Strategies in Handling Collegiality Issues*. Academic Chairperson Conference, Orlando, Fla.

Behm, G., Heyden, D., Laury, D., Till, R. (Oct 2012). *Finding a Star: A strategic approach to working with underprepared deaf/hard-of-hearing students*. AHEAD Conference, New Orleans.

Laury, D., Mousely, K. (2010). *Transferring Knowledge of Trigonometry to/from Precision Machining Blueprints*, League of Innovation, STEMTech, Orlando, Fla.

Ting, S. and Laury, D. (2002). *Enhancing Idea Tools and Hands-On Activity.* NTID Learning Consortium.

Laury, D. (2002). *Developing Quiz, Homework, and Lecture contents.* NTID Learning Consortium.

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Laury, D., Mallory, J.R. (2001). *Digital Video Conferencing for Remote Tutoring / Teaching of Deaf Students*. Technology and Education Symposium, Rochester NY. (Formal session).

Laury, D. (2001). *How Teachers for the Deaf/Hard of Hearing are using the Internet to Instruct the Deaf/Hard of Hearing*. Technology and Education Symposium, Rochester NY, (Poster Session).

Laury, D. (2000). *Introduction to HTML via PowerPoint, Visual ASL.* ETTR, NTID Learning Consortium.

Laury, D. (1999). *Use of the Web with Deaf Students*. Soros Foundation, Project Access Budapest Hungary, Rochester, NY.

Laury, D. (1999). *How Teachers Use the Web: What Can You Do with the Web / Internet as a Tool?*. Soros Foundation, Project Access Budapest Hungary, Rochester, NY.

Laury, D. (1999). *How Teachers Use the Web: Cracking the Lesson Development Model to include the Web*. Soros Foundation, Project Access Budapest Hungary, Rochester, NY.

1. **PROFESSIONAL ACTIVITIES**
   1. **CURRICULUM DEVELOPMENT**

* **Department of Engineering Studies, Chairperson**
  + Successfully administered department programs’ quarter-to-semester conversion through NYSED, June 2011 for the Applied Mechanical Technology, Computing Aided Drafting Technology, and Computer Integrated Machining Technology associate degree programs.
  + Utilized leadership to develop an articulation agreement by collaborating with RIT’s College of Applied Science and Technology’s Mechanical Engineering Technology and Manufacturing Engineering Technology Associate + Bachelors’ program.
  + Utilized leadership to develop a 5-page concept paper (preliminary articulation) by collaborating with RIT’s College of Applied Science and Technology’s Civil Engineering Technology’s Associate + Bachelors’ program.
  + Administered discontinuous of the Automation Technology program; seeking a program niche as potential program replacement.
* **Computer Technology Courses developed and taught at ICS (and formerly ACT)**

|  |  |  |
| --- | --- | --- |
| Network Security, ST | Network I, II, III | PC Hardware I, II |
| Internet Technologies I PC Operating Systems Career Sampling | | |

* **Summary: Engineering Technology Courses developed and taught at CADT (formerly IDT)**

|  |  |
| --- | --- |
| Introduction to Materials Process | Blue Print Reading I |
| Technical Mechanical Drafting I, II, III Introduction to CAD | |
| Machine Design I, II Basic Technical Draftin | |
| General and Geometric Tolerance I, II | |

g I, II, III

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* 1. **EXTERNAL LECTURES, WORKSHOPS and EXHIBITS PRESENTED**
* Deaf Initiative for Information Technology

National Science Foundation, award number **0070982**

Rochester, NY

June 12-16, 2006 Introduction to Network Security June 27-July 1, 2005 Introduction to Network Security November 15-19, 2004 Introduction to Network Security May 24-28, 2004 Windows Server 2003

May 24-28, 2003 Windows Server 2000

June 10-14, 2002 Network Inspection, Maintenance, and

Troubleshooting

|  |  |  |
| --- | --- | --- |
| **C.** | **PROFESSIONAL ORGANIZATIONS** |  |
|  | * America Society of Engineering Education | 2007-Present |
|  | * America Drafting Design Association | 2007-Present |
|  | * NYS Engineering Technology Association | 1995 - 2000, 2007 - Present |
|  | * America Drafting Design Association | 1994-1999 |
|  | * Network Professional Association |  |
|  | (Board of Directors) | 2002-2003 |
|  | * CompTIA Membership | 2002-Present |
|  | * Internet Society (Student Membership) | 1998-2000 |
|  | * ASHRAE (Student Membership) | 1989-1990 |

|  |  |
| --- | --- |
| **III. CONTRIBUTIONS TO THE INSTITUTE**  **RIT COMMITTEE WORK** |  |
| RIT University Tenure Committee | 2010-2011 |
| RIT DRC | 2009-2010 |
| RIT Faculty Senate | 2002-2005 |
| RIT Faculty Senate – Treasure | 2004-2005 |
| RIT Security Center Organizing Committee | 2001-2002 |
| ETA (Engineering Technology Association), | 1998-1999 |

Institute Rep.

|  |  |
| --- | --- |
| **NTID COMMITTEE WORK**  Tenure Committee, Chairperson | 2010-2012 |
| Tenure Committee, Chairperson | 2009-2010 |
| SD2020 – Flexible Direct Instruction Committee, Co-Chair | 2009-2010 |
| NTID Faculty Senate – Chairperson | 2005-2006 |
| NTID Faculty Senate to RIT | 2002 – 2006 |
| Instructional Technology and Education of the Deaf, |  |
| Technology Symposium Program Committee,  Peer Reviewer | 2003-Present |
| NTID 2003 Reunion Committee | 2001-2003 |
| Quality of Life Task Force  Deaf Professional Group (DPG) Steering Committee | 2000 |

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DPG’s Award of Excellence Chairperson 2001-2003

DPG Leadership Series Coordinator 1999

DPG Assistant to Liaison 1999

DIS Liaison 1998, 1997

NCI Advisory Board for Local News Committee 1999 – 2004

EPB Working Group 1997–1998

ETAG (Engineering Technology Ad Hoc Group) 1996–1997

CAG (IDT Curriculum Advising Group) 1994–1996

**NTID EXTRACURRICULAR ACTIVITIES**

Master of Science – Committee Advisor

* Scott Wolff 2010-2011
* Tracy Washington 2002
* Fadi Abu Shaaban 2001

Summer Vestibule Program 1994–Present

Explore Your Future 1994–1998

EYF Engineering Technology Group Leader 1996–1997

SVP Industrial Drafting Technology Team Leader 1996–1997

**DEPARTMENTAL SERVICES**

Search Committees:

DES – Staff Assistant, Chair 2010-2011

DES – Staff Assistant, Chair 2009-2010

DES/CAT – Instructional Faculty, Co-Chair 2009-2010

Counselor- Chairperson Rep. 2009-2010

DES – CIMT, Instructional Faculty 2008-2010

Network Lab Assistants Supervisor 2001 – 2005 Department Team Leader

* Network Team Leader 2000-2006
* PC Hardware Team 2000 – 2006
* PC Operating System Team 2000-2006 ACT Advisory Group 2002

CTS Curriculum Committee 2000 – 2003

Departmental Search Committee

* CTS/ACT Search Committee 2000
* CTS/CADT Search Committee 2000
* CTS/ACT Search Committee for Chairperson 2000
* CTS/ACT Search Committee 1999

1. **COMMUNITY ACTIVITIES**

RIT Image 2008-present

NTID Graduation Ceremony, annual

* + Served as a Marshall for CTS, 1998

Greater Rochester Associate for the Deaf Golf 2000 - Present Greater Rochester Associate for the Deaf Golf, Coordinator 2004-2011 NTID Alumni Golf Tournament 2001- Present

EAAD Softball Tournament – Sponsored by DWR 1995

* + Award: Team Sportsmanship Winner
  + Award: Coach of the Tournament, Eastern Division

Henrietta Softball League sponsoring “Jessica” 1994 - 1995

Sigma Nu International Fraternity Chapter Advisor 1991 – 1995

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Sigma Nu International Fraternity Colony Implementation Advisor 1990 Hillside Children Center Thanksgiving Dinner 1990 - 1993

Hillside Children Center Clean up: Sigma Nu Fraternity 1990 - 1993

**William Robert LaVigne AIA**

477 Maplewood Lane

Webster, NY 14580-1762

Cell: (585) 478-7950

Work: (585) 475-6387

**Education**

Rochester Institute of Technology, MS Instructional Technology, 1991

University of Notre Dame, B.Arch (Architecture), 1977

**Registration**

Registered Architect, New York State 1981 License No. 014983

Licensed to practice the profession of architecture having graduated from an accredited program, served a three year internship with a licensed professional and successfully completed 37 hours of examination.

**Professional Experience**

Department of Engineering Studies National Technical Institute for the Deaf

Program: Computer Aided Drafting Technology

2000-present

College of Imaging Arts and Sciences (adjunct) Rochester Institute ofTechnology

Program: Interior Design

2007-2009

Department of Construction Technologies (tenured 1991) National Technical Institute for the Deaf

Program: Architectural Technology

1985-2000

Clark Patterson Associates (NTID sponsored leave of absence) 186 North Water Street

Rochester, NY 14604

Fall 1999

Architectura, P.C.

247 North Goodman Street Rochester, NY 14607

Summer 1989

Burwell & Banter Architects (defunct) Rochester, NY

1980- 1985

Wiard & Burwell Architects (defunct)

* Rochester, NY

1977-1980

**Professional Organizations**

The American Institute of Architects 1977-present

Membership includes regional affiliation with the New York State Association of Architects and local affiliation with the Rochester (NV) Chapter. The Rochester Chapter (RCAIA) represents the interests of approximately 200 licensed architects and 80 associates in the region.

I am an officer of the RCAIA Board through 2014. I have also served on the RCAIA Scholarship Committee from 2006 to 2009 and again from 2011to 2013. The committee has awarded, during these time periods, nearly $35,000 to deserving high school students beginning degree programs and students already in accredited programs. Recent recipients have included several students from RIT's new Masters of Architecture program.

New York State Engineering Technology Association 1988-present

**Representative Research Projects**

NTID Learning Center Redesign Study 2012

Faculty/student research project with the NTID Learning Consortium

Historical Analysis of the Rochester School for the Deaf 2011 Faculty/student research project with a committee of representatives from the

Rochester School for the Deaf. Students developed historical campus site plans

of the years 1870, 1882, 1930, 1941, 1949, 1962, 1966, 1967, 1972, 2001 and 2008.

These campus development research documents were included in a newly

* established on-site museum.

Redesign of the former NTID Photo Technology lab

Faculty/student research project with the manager of NTID Facility Services

2010

NTID Semiconductor Technology/Robotics Technology facilities design Chaired the committee that proposed lab space for the new

Automation Technologies program. I produced the preliminary design and design development documentation for this project.

Construction Cost: approximately $260,000 Equipment Cost: approximately $240,000

2002

NTID Computer Aided Drafting Technology facilities design

Produced, as part of the curriculum development team for this new program, preliminary design and design development documentation.

Construction Cost: approximately $210,000 Equipment Cost : approximately $190,000

2000

**Representative Institute Committees**

|  |  |
| --- | --- |
| CADT Quarter to Semester Conversion Committee (co-chairperson) | 2010-12 |
| Search Committee for the Director of NTID Center for Access Service | 2010- 11 |
| Department of Engineering Studies Coop Coordinators | 2007-13 |
| Search Committee for Department of Engineering Studies Support Department (chairperson) | 2007-08 |
| RIT Campus Environment Committee | 2005-06 |

# •

### APPENDIX G ‐ Cost Model: Revenue / Cost Projections /

1. **Expenses**

3

4

1. This program will not significantly increase NTID admissions. However, it is intended to
2. increase the success rate of students who wish to enter Civil Engineering Technology
3. offered by RIT’s College of Applied Science and Technology. In the same way, this initiative
4. will not significantly increase costs to NTID.

9

1. The financial information presented in the following pages represents how existing
2. resources will be assigned to this program.

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13

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***Engineering Studies Department Civil Technology Associate Degree Program***

***Table1***

***Projected Expenditures For The Proposed Program***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Year 1 AY14-15*** | ***Year 2 AY15-16*** | ***Year 3 AY16-17*** | ***Year 4 AY17-18*** | ***Year 5 AY18-19*** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Faculty Position 1.0 FTE | $ | 75,602 | $ | 77,900 | $ | 80,200 | $ | 82,600 | $ | 85,100 |
| Staff Assistant FTE | $ | 1,600 | $ | 1,600 | $ | 1,700 | $ | 1,800 | $ | 1,900 |
| Benefits | $ | 31,000 | $ | 33,000 | $ | 34,000 | $ | 36,000 | $ | 38,000 |
| ***Faculty*** | **$** | **108,202** | **$** | **112,500** | **$** | **115,900** | **$** | **120,400** | **$** | **125,000** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Equipment Rental*** | **$** | **2,200** | **$** | **2,300** | **$** | **2,400** | **$** | **2,500** | **$** | **2,600** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Student Salaries | $ | 1,000 | $ | 1,100 | $ | 1,200 | $ | 1,300 | $ | 1,400 |
| Computer Charges | $ | 4,800 | $ | 8,300 | $ | 10,900 | $ | 12,400 | $ | 12,800 |
| Instructional Supplies | $ | 1,000 | $ | 1,100 | $ | 1,200 | $ | 1,300 | $ | 1,400 |
| Telephone | $ | 600 | $ | 700 | $ | 800 | $ | 900 | $ | 1,000 |
| Travel-Conferences | $ | 600 | $ | 700 | $ | 800 | $ | 900 | $ | 1,000 |
| Tuition Payments for RIT Credits | $ | 2,100 | $ | 5,300 | $ | 5,400 | $ | 5,600 | $ | 5,800 |
| ***Other*** | **$** | **10,100** | **$** | **17,200** | **$** | **20,300** | **$** | **22,400** | **$** | **23,400** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Total New Resources*** | ***$*** | ***120,502*** | ***$*** | ***132,000*** | ***$*** | ***138,600*** | ***$*** | ***145,300*** | ***$*** | ***151,000*** |

***Engineering Studies Department Civil Technology Associate Degree Program***

***Table 2***

***Projected Revenue From New Students***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Year 1 AY14-15*** | ***Year 2 AY15-16*** | ***Year 3 AY16-17*** | ***Year 4 AY17-18*** | ***Year 5 AY18-19*** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Enrollments Fall Semester | 0 |  | 1 |  | 2 |  | 2 |  | 2 |  |
| Enrollments Spring Semester  Total Semesters of Enrollment | 0 |  | 1 |  | 2 |  | 2 |  | 2 |  |
| Semester Tuition Rate | $ | 7,094 | $ | 7,448 | $ | 7,821 | $ | 8,212 $ |  | 8,623 |

`

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 0 | 2 | 4 | 4 | 4 |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Additional Tuition Revenue | $ | - | $ | 14,897 | $ | 31,284 | $ | 32,848 | $ | 34,490 |
| State Revenue |  | $0 |  | $0 |  | $0 |  | $0 |  | $0 |
| Transfer From Exisiting Resources | $ | 120,502 | $ | 117,103 | $ | 107,316 | $ | 112,452 | $ | 116,510 |
| *Grand Total* | *$* | *120,502* | *$* | *132,000* | *$* | *138,600* | *$* | *145,300* | *$* | *151,000* |

NTID tuition is fully applied to the program in this model. This is somewhat misleading as tuition is applied to the support of all academic and non academic program accessed by the students. This program does not fit into the Net Tuition Revenue Model used by the other RIT colleges. Tuition is subsidized by the Federal Appropriation and is therefore not cost related

***Engineering Studies Department Civil Technology Associate Degree Program***

##### Table 3

***Projected Capital Expenditures***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Year 1 AY14-15*** | ***Year 2 AY15-16*** | ***Year 3 AY16-17*** | ***Year 4 AY17-18*** | ***Year 5 AY18-19*** |

Capital Facilities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| $0 | $0 | $0 | $0 | $0 |
| $0 | $0 | $0 | $0 | $0 |
| $0 | $0 | $0 | $0 | $0 |

Equipment

Total Capital Expenditures

Additional equipment to support this program is not required. As with all programs there will be needs for exisiting equipment to be upgraded as technology develops. This expense will be supported through existing NTID policies and funded through current operating budgets.

New facilities, such as laboratories, will not be required.

1 **APPENDIX H ·ARTICULATION AGREEMENT**

2

3 Civil Technology Program

1. National Technical Institute for the Deaf
2. Rochester Institute of Technology

6 Transfer Agreement

7 with

8 Civil Engineering Technology Program

9 College of Applied Science & Technology

10 Rochester Institute of Technology

11 **January 2014**

12

13 The purpose of this transfer agreement is to:

14

15 • Attract qualified students to RIT's College of Applied Science & Technology (CAST);

1. • Facilitate the transition of qualified transfer students from the National Technical Institute for the
2. Deaf (NTID) to CAST;

18 • Encourage academic cooperation and exchange of information between the NTID and CAST.

19 TERMS

20

21 RIT's College of Applied Science & Technology agrees to accept into the Civil Engineering Technology

1. program (CVET-BS) those qualified students who have successfully completed the Associate of Applied
2. Science (AAS) in Civil Technology offered through the NTID's Engineering Studies Department. Qualified
3. students should demonstrate success and a student in good standing at NTID. Transfer credit will be
4. awarded for courses completed with a grade of B or better for courses coded "NCAO" and "NMTH" and a
5. grade of C or better for other courses. In addition, a minimum overall GPA of 2.5 or better must be
6. achieved to be accepted into the CVET-BS program.

28

29 A review of th·s tran fer agreement can be initiated by either college in the case of significant curriculum

30 changes. owevej.1.1is agreement will be reviewed no less t n every five ) years.

*4-M\_ .J)lACt*

Dr. F ed Walker, Dean . Gerard Buckley, Preside ti ean College of A - ed Science & Technology National · I Institute *i* h Deaf



Dr. · . Tolan, Senior Associate ean College of Applied Science & Technology



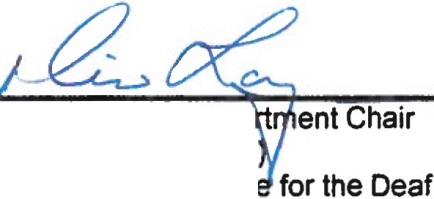
Todd Dunn, Department Chair Civil Engineering Technology,

l;\_!:! vironm tal Management & Saftey\_(gETEMS)

?\_

D . Stephen Aldersley, Associate VPt1'cademic Affairs

National Technical Institute for the D af



Dino Laury (Lauria), Depa Engineering Studies (DES National Technical lnstitut

Scott Wolcott, Program Chair

Civil Engineering Technology (CET)

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1. ARTICULATION AGREEMENT
2. National Technical Institute for the Deaf / RIT CAST
3. AAS Degree – Civil Technology
4. BS Degree – Civil Engineering Technology 5

|  |  |  |  |
| --- | --- | --- | --- |
| NTID CIVIL TECHNOLOGY | | RIT CAST CVET | |
| **Year 1** | | **Year 1** | |
| NCAD-150 Engineering Graphics in AEC | 3 | CVET-150 Comp. Aided Design & Drafting | 3 |
| NCAD-255 Constr. Materials & Methods I | 3 | CVET-140-Materials of Construction | 2 |
|  |  | CVET-141-Materials of Construction Lab | 1 |
| First Year Seminar (LAS-F1) | 3 | First Year Seminar (LAS-F1) | 3 |
| LAS-Elective (NMTH-275 Advanced Math) | 3 | MATH-111-Precalculus (LAS-P7A) | 3 |
| NCAR-100 Freshman Seminar | 1 | ACSC-010 YearOne | 0 |
| NCAD-180 Civil Technology Graphics | 3 | CVET-180-Civil Engineering Graphics | 2 |
|  |  | CVET-181-Civil Engineering Graphics Lab | 1 |
| UWRT-150 Writing Seminar (LAS-F2) | 3 | UWRT-150 Writing Seminar (LAS-F2) | 3 |
| MATH-171 Calculus A | 3 | MATH-171-Calculus A (LAS-P7B) | 3 |
| PHYS-111 College Physics I w/ lab (LAS-P6) | 4 | PHYS-111-College Physics I w/lab (LAS-P6) | 4 |
| LAS-P1 (ethical) | 3 | GE Perspective (LAS-P1) | 3 |
| **Year 2** | | **Year 2** | |
| CVET-160 Surveying | 3 | CVET-160-Surveying | 3 |
| CVET-161 Surveying Lab | 1 | CVET-161-Surveying Lab | 1 |
| MCET-220 Principles of Statics | 3 | CVET-210 Statics | 3 |
| MATH-172 Calculus B | 3 | MATH-172-Calculus B | 3 |
| PHYS-112 College Physics II w/ lab | 4 | PHYS-112-College Physics II | 4 |
| LAS-P2 (artistic) | 3 | GE Perspective: (LAS-P2) | 3 |
| CVET-170 Elements of Building Construction | 3 | CVET-170-Elements of Building Construction | 3 |
| MCET-221 Strength of Materials | 4 | CVET-220-Strength of Materials | 4 |
| CHMG-121 Chemical Princ. & Apps. | 3 | CHMG-121 Chem. Princ. and Apps (LAS-P5) | 3 |
| LAS-P3 (global) | 3 | GE Perspective: (LAS-P3) | 3 |
| LAS-P4 (social) | 3 | GE Perspective: (LAS-P4) | 3 |
| Notes:  Students are encouraged to take the CVET courses in Statics (CVET-210) and Strength of Materials (CVET-220), rather than the MCET courses listed above (MCET-220 & MCET-221). However, the CVET- BS program will accept the MCET courses as substitutes.  NTID students will need to pick up two technical courses (Elementary Structures and Elementary Soil Mechanics) in the third year of RIT CAST. The reason for this movement is to satisfy the AAS requirement of Liberal Arts. | | | |
|  |  | CVET-230-Elementary Structures | 3 |
| CVET-240-Elementary Soil Mechanics | 3 |
| CVET-241-Elementary Soil Mechanics Lab | 1 |

6

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