**CONCEPT PAPER FOR THE PROPOSED**

## **I. Title/Department/**College/Proposer Contact Name & Contact Information

**Associate of Occupational Studies (AOS) in Culinary Arts**

Business Studies Department, National Technical Institute for the Deaf (NTID)

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## II. Goals and Justification for the Proposed Program

NTID’s Mission Statement still serves as the basis for all of its educational programs.

*The primary mission of the National Technical Institute for the Deaf is to provide deaf students with outstanding state-of-the-art technical and professional education programs, complemented by a strong arts and sciences curriculum that prepares them to live and work in the mainstream of a rapidly changing global community and enhance their lifelong learning.*

In supporting this mission statement, NTID’s Strategic Decisions 2020 states that “NTID needs to update their career-focused associate degree programs to meet the demands of future job markets.” “Although restaurant goers may be unaware of it, the restaurant industry in America is facing an ongoing problem: . . . there is a shortage of skilled employees.” ([www.career.org/news/shortage-of-skills-the-culinary-sector](http://www.career.org/news/shortage-of-skills-the-culinary-sector))

*Our extremely mobile society continues to rely on pre-packaged foods, prepared foods, fast foods, diners, food bars, and restaurants routinely, and it is not expected to change its habits any time soon. Jobs within the food industry are enormous. The culinary arts job outlook for services in pre-packaging foods, food research, and development, for cafeterias, hospitals, and care centers is energetic through managed service companies.*

*Catering services have also taken a boost as more companies hire catering services as a convenience for their employees, and more office buildings incorporate food bars and coffee shops into their floor plans. Health resorts, sports facilities, and whole grain bakeries also hire the special skills of a culinary arts graduate.* (<http://educationcareerarticles.com/career-information/job-market-outlook/overview-culinary-arts-job-market-outlook>)

For individuals seeking a life in the art of food, culinary programs provide information about the chemistry, preparation, skills, and knowledge to become a professional contender in the career of cooking. According to industry professionals, if you want to become a professional chef, it is critical to acquire an education in Culinary Arts which would give you an edge over the competition when it comes to getting hired at the top restaurants. Since culinary professionals are constantly exploring and evolving the industry, students will find a wealth of career choices for trained chefs upon graduation. Establishing an AOS in Culinary Arts at RIT/NTID will allow our program to teach students the “farm-to-table” concept, since we reside in Finger Lakes’ region, which also is driving menus in some of the finest restaurants worldwide.

Overall job opportunities are expected to be very good as a result of employment growth and the need to replace workers who leave the occupation. According to the National Restaurant Association, the restaurant industry employs 14 million people in both front-of-the-house and kitchen positions, and is one of the largest private-sector employers. While almost 60 percent of all chefs, cooks and food preparation workers are employed in restaurants and other retail eating and drinking places, about 20 percent work in institutions such as schools, universities, hospitals and nursing homes. Grocery stores, hotels, and other organizations make up the difference. The outlook for career opportunities is promising, as the restaurant industry is projected to add 1.3 million positions in the next decade.(<http://www.restaurant.org/News-Research/Research/Facts-at-a-Glance>).

The proposed Culinary Arts program provides students with hands-on as well as the theoretical aspects of food service. Graduates enter the job market with entry-level skills and a background which enhances their chances for numerous opportunities in the broad field of culinary arts. Students are taught in modern labs and gain experience working in numerous venues such as the college’s student-run dining room, at college-sponsored events, and through co-op jobs in local restaurants, hotels, country clubs and casinos. The Bureau of Labor Statistics indicates that employment for chefs and head cooks is projected to grow 9 percent--faster than the average for all occupations, plus cooks and food preparation workers is projected to be 5 percent from 2014 to 2024. The percentage of growth for cooks within institutions and cafeterias is 6 percent and restaurants is 14 percent. ([https://www.bls.gov/ooh/food-preparation-and-serving/cooks.htm#tab-6](https://www.bls.gov/ooh/food-preparation-and-serving/cooks.htm%23tab-6)).

The Culinary Arts AOS program will prepare students for entry-level employment in the food industry immediately following graduation. NTID is committed to recruiting and enrolling a diverse student population and we believe this program could potentially attract a number of these students accepted at NTID. An ACT score of 14 is required for entrance to this AOS program for all students.

## **III. Description of the New Program**

Throughout the Culinary Arts associates degree program, food preparation and management skills are developed. Besides foundations-based coursework and skills development in hot food preparation, specific areas of study include wine appreciation, baking, methods and ingredients of international cuisines, America's regional cuisines, banquet management and buffet presentation and the skills of the cold kitchen.

Through this proposed program, students will also have the opportunity to test and refine their skills, through co-op jobs, internships and partnerships with multiple local restaurants and hotels, while learning hands-on what food, drink and service styles appeal to the modern consumer. Graduates of the program can be employed throughout the hospitality industry as chefs, bakers, cooks and apprentices in hotels, restaurants, institutions, clubs and hospitals.

Upon graduation with an Associate in Occupational Studies degree in Culinary Arts, the graduate will be qualified to:

* demonstrate food preparation methods appropriate for the specific production situation and food item;
* analyze the nutritional composition of a recipe and be able to successfully modify and prepare dishes meeting recognized nutritional guidelines;
* maintain a safe and sanitary environment for food preparation and service;
* utilize appropriate technology needed to support culinary arts/food operations;
* effectively communicate face-to-face and in brief written statements with superiors, peers, subordinates and customers in both work and social settings.

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| **Fall Semester (1st year) Credits**   NCAR-100 Freshman Seminar 1   LAS Elective: NMTH xxx Culinary Math 3   NBCA-140 Culinary Arts Fundamentals 3   NBCA-150 Sanitation & Safety 3   NXXX-xxx ASL/Deaf Cultural Studies\* 3  13 | **Spring Semester (1st year) Credits**   NENG-212 Career English I 3   NBCA-160 Culinary Nutrition 3   NBCA-165 Intro to Baking & Pastries 3   NBCA-145 Introductory Food Prep 3   NCOM-xxx Comm, Social, Global Awareness\*\* 3  15 |
| **Fall Semester (2nd year) Credits**   NENG-213 Career English II 3   NBAC-175 Intermediate Baking & Pastries 3   NBCA-180 Intermediate Food Prep 3   NAST-210 Essentials of Bus Communication 3  12 | **Spring Semester (2nd year) Credits**   NBCA-190 Hospitality Marketing 3   NBCA-195 Advanced Food Prep 3   NBCA-185 Menu Develop & Culinary Purchase 3   NBCA-210 Hospitality and Customer Service 3   Wellness Education 0  12 |
| **Fall Semester (3rd year) Credits**   NBUS-221 Essentials of HR Management 3   NBCA-225 Catering Management 3   NBCA-230 American/International Cuisine 3   Open Elective 3  12 | A summer co-op work experience is required between the fourth and fifth semester.  NTID Perspective Categories:   ASL/Deaf Cultural Studies\*  Comm, Social, Global Awareness\*\*  NCOM-207 Org. Comm & Deaf Employee  NCOM-202 Communication Across Cultures   NCOM-206 Effective Teams  NCOM-201 Interpersonal Relationships |

**Total Credits: 64**

**IV. Fit with RIT Academic Portfolio Blueprint Characteristics and Criteria**

**Characteristics:**

1. **Innovative Teaching and Learning:**

Much of the instruction in this program will be interactive and will include the use state-of-the-arts culinary equipment. Students will be taught in modern culinary labs similar to those utilized throughout the hospitality, restaurant and food service industries.

1. **Experiential Learning:**

The proposed AOS Culinary Arts program provides students with hands-on as well as the theoretical aspects of food service. Students will work directly with peers, mentors, and local culinary experts. They will gain experience working in numerous venues such as the college’s student-run dining room, at college-sponsored events, and through co-op jobs in local restaurants, hotels, country clubs and casinos. Students will be required to complete one co-op experience.

1. **Inclusive Excellence:**

NTID students will be preparing for careers in a field where no NTID AOS degree programs currently lead for deaf and hard-of-hearing students. The Culinary Arts AOS program is primarily for students interested in specializing in positions such as chef, caterer, line cook, head cook, plus other food and beverage positions.

**Criteria:**

1. **Centrality:**

In response to NTID’s Strategic Plan 2020, the Business Studies Department reviewed its portfolio of career-focused degree programs and concluded the need to add an AOS Culinary Arts degree option. Through a unique blend of curricular and experiential learning this program prepares its students to broaden their thinking, their perspectives, and their actions through personal and professional development which will prepare “T-shaped graduates” described in RIT’s 2015-2025 Strategic Plan.

**Marketability**

The Business Studies Department should have no problems attracting students to an AOS degree in Culinary Arts. Annually a few students arrived during SVP thinking they will have access to NTID’s AS in Hospitality and Service Management program. However, through the English placement test process, they learn they are not qualified. Therefore, the proposed AOS program targets students who will meet the entry requirements with an ACT score of 14 or higher and placed into the Career English sequence of courses.

Scott Hooker, Direction of NTID Office of Admissions, fully supports the development of a new AOS degree in Culinary Arts. “Based on marketing research, and admissions anecdotal information, the AOS in Culinary Arts will meet our needs, be of interest to many of our prospective and current students and help with NTID’s future enrollment.”

**Quality**

One faculty member within the Business Studies Department has sufficient credentials/expertise to teach some of the technical courses, assuring quality course delivery. Innovative and effective pedagogical approaches that support student centered learning, including alternative delivery systems and technology, which are the cornerstone of NTID Business Studies faculty approach to course delivery. This program will incorporate the same high standards for rigorous academic learning and outcomes for our students’ career preparation as demonstrated in our other associate degree programs.

1. **Synergy with Other Programs**

Both the Essentials of Human Resources Management and the Essentials of Business Communication course incorporate interactions between these culinary students, NTID Employment Advisors, and outside speakers in an effort to prepare students for the challenges they will face in the workplace. In addition, the Culinary Arts students will take these required classes with students in the Business Technology AOS plus AAS Administrative Support Technology programs and the AAS Accounting Technology programs. Business students from these majors will learn to share the common language of business as the various concepts and theories of business are applied to their course work.

1. **Administrative Structure for the New Program**

The administrative structure of the proposed program will follow the standard administrative structure of NTID. The chair will work with the department’s program coordinator as needed relative to administrative duties such as course scheduling, faculty assignments, and program budget.

1. **Enrollment Expectations and Sustainment**

Since the overall job opportunities are expected to be very good as a result of employment growth in the restaurant and food service industries plus the need to replace workers who will leave the occupation, we believe we will be able to attract students to an AOS Culinary Arts degree program. Throughout the Culinary Arts associates degree program, food preparation and management skills will be developed and will provide job opportunities in food preparation, baking and catering.

We anticipate that we can fill the enrollment demands primarily from students that would not otherwise come to NTID. Students accepted into this program will be screened to meet the enrollment criteria for this associate degree, meaning they have the ACT scores indicating readiness to take the courses identified in the first semester of the planned course mask. The enrollment numbers given to us by NTID’s Admissions are conservative. There is anecdotal evidence from NTID faculty who are familiar with high school level deaf or hard-of-hearing culinary programs around the country that there is a real need to provide additional education at the associate degree level.

Enrollment projections, certified by Jim Miller, Senior VP of Enrollment Management, are summarized in the following table and detailed in the Appendix A for years 1-5. This table shows that we anticipate enrolling 6 students Fall the first year. We project 90% retention with 5 students persisting and 7 students enrolling in year 2, yielding a total of 12 students in the fall and spring semesters in year 2. By year 3 there would be 5 students persisting from year 1, 6 students persisting from year 2, and 8 students enrolling in fall year 3. The students who began in year 1 will graduate after fall semester year 3 yielding a total of 19 students in the fall and 14 in the spring. Similar patterns are projected for years 4 and 5. In addition to the projected enrollment figures, we have added the expected graduation rate at approximately 40 percent for the first five years of this new program. This graduation rate is comparable to other AOS program graduation rates as shown in an Appendix B.

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| **Enrollment** | **Year 1 AY 19-20** | **Year 2  AY 20-21** | **Year 3  AY 21-22** | **Year 4 AY 22-23** | **Year 5 AY 23-24** |
| Enrollment Fall Semester | 6 | 12 | 19 | 22 | 25 |
| Enrollment Spring Semester | 6 | 12 | 14 | 16 | 18 |

1. **Impact of Resources**

One faculty member within the Business Studies Department has sufficient credentials/expertise to teach up to five of the technical courses in the program mask. However, this individual’s time will be divided between direct instruction in the AOS program and tutoring students in the AS/BS in International Hospitality and Service Management. The Business Studies Department will need to hire an additional 1.5 new lecturers to begin work in AY 2019-20. These faculty members will primarily teach the seven (7) culinary arts lab-based food-prep courses shown in the program mask. These lab-based food-prep courses require unique sets of culinary arts skills. In addition, any courses not covered by the current tenured faculty member will need to be covered by our new lecturers. We already have the necessary faculty needed to cover the two other business courses shown in the mask, one general business (NBUS) course and one business communication course (NAST).

Within the Business Studies Department, it is anticipated that there will be another retirement within the next few years. This retirement may impact instruction in some of our current AOS/AAS degree programs. However, by the time this occurs, the Department will be able to determine all instructional needs for specific types of instructional expertise within the accounting, administrative support, business administration, and culinary arts programs so they can be appropriately staffed.

We are looking at the possibility of repurposing space on the first floor of NTID, east side. This location would place the culinary arts labs close to the Dyer Art Gallery. With the conversion of this space into state-of-the-arts culinary labs, we will be able to offer multiple sections of our core culinary arts courses. It would be ideal to have 10 to 12 culinary stations for instruction purposes. This design approach will allow for twice as many students to join the program as currently indicated by the Admissions numbers and additional future growth. The Business Studies Department has five dedicated computer lab spaces that can be utilized for a couple of the more theoretical culinary courses versus the hands on training needed in the culinary labs.

Mark Pfuntner, a tenured faculty member, has a large network of business/industry contacts from whom he will seek equipment and monetary donations for the AOS Culinary Arts program. Mark’s background is in Hospitality and Service Management and he has contact with culinary and hospitality professionals on a regular basis. As an adjunct faculty member at MCC, he is discussing their fees and costs for their culinary program offerings for comparison purposes. He will work in conjunction with Bryan Hensel, NTID Senior Director of Development and Alumni Relations, to reach out to professional individuals or companies who would be interested in donating to our culinary program. Currently, we are also investigating the possibility of beginning instruction for this AOS Culinary Arts program in the International Hospitality and Service Management Culinary Arts Labs in the Eastman Building.

1. **Cost Model**

The NTID cost model analysis, which will be forwarded to the Provost, includes five tables detailing projected expenditures and revenue over the first five years of the program. Faculty/staff salary and benefits plus costs such as computers, travel/conferences, and overhead costs total approximately $1,740,200. Costs for instructional supplies, lab rental and/or renovation have not been included as they are still under negotiation. There are no anticipated capital expenditures built into the Cost Model at this time. However, one general estimate for construction/renovation of NTID’s space for a culinary lab is approximately $250,000. Installation of kitchen equipment is estimated to be between $500,000 to $750,000. An approximate cost of $3,000 for food and other supplies (ex: cleaning supplies, sundries, etc.) per lab course is a good benchmark. To help defray some of these costs, students could possibly be assessed lab fees for some expenses, such as a chef’s hat, coats, knives, and other kitchen/educational tools.

In addition, we are beginning to look for general cost information to use for comparison purposes from other programs offered at the community college level. We anticipate that donations will become a critical part of establishing this program. We are aware of other organizations in the Rochester area who have received grants and used equipment to initiate non-accredited training programs for other groups of young adults. All costs for a Culinary Arts program will have to be investigated further if we are given permission to develop the full program proposal and then initiate the program in AY 2019-20.

Expenses which are shown in the Cost Model tables are projected to be offset by $1,776,400 in tuition revenue. Total revenue minus expenses over the five years is estimated to be approximately $36,240 which may change based on the costs of labs and supplies. [Note that NTID’s tuition is applied to support all academic and non-academic programs accessed by students and the program does not fit into the Net Tuition Revenue Model used by other RIT colleges. Tuition is subsidized by federal appropriations and is therefore not cost related.]

1. **Conclusion**

In summary, the AOS degree in Culinary Arts will allow us to expand our Business Studies portfolio of programs into additional career areas. This program will provide a broader education for deaf and hard-of-hearing students and subsequent employment opportunities in hospitality industry locals such as hotels, restaurants, institutions, clubs, and hospitals. Graduates will be employed in private and public sector entry-level positions as chef, caterer, line cook, head cook, or food and beverage manager.

This concept paper was developed and reviewed by the Business Studies curriculum committee: Mary Lou Basile, chair, and committee members comprised of the faculty in the Business Studies Department. There was unanimous support for developing and offering an AOS in Culinary Arts degree program by the Department Curriculum Committee.

## XI. Summary of Community Input and Response to Input

**APPENDIX A: Projections based on numbers supplied by NTID Admissions**

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| **NTID CULINARY ARTS AOS—ENROLLMENT PROJECTIONS** | | | | | | | | | | | |
|  | **Year 1** | | |  |  | **Year 2** | | | | |  |
|  | Enroll 6 Students | | | **Total Per Semesters** | Enroll 7 Students | | | | | Persisting | **Total Per Semesters** |
|  | Internal Transfer | Would come to NTID w/o program | NEW to NTID | **TOTAL** | Internal Transfer | | Would come to NTID w/o program | NEW to NTID | **Total** | From  Year  1 | **TOTAL** |
| Fall Semester | 2 | 1 | 3 | **6** | 2 | | 1 | 4 | **7** | 5 | **12** |
| Spring Semester | 2 | 1 | 3 | **6** | 2 | | 1 | 4 | **7** | 5 | **12** |

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| **Year 3** | | | | | | | | **Year 4** | | | | | | | |
| **Enroll 8 Students** | | | | **Persisting** | | | **Total per Semester** | **Enroll 9 Students** | | | | **Persisting** | | | **Total per Semester** |
| Internal Transfer | Would come to NTID w/o program | NEW to NTID | **Total** | From  Year 1 | From  Year 2 | **Total** | **Total** | Internal Transfer | Would come to NTID w/o program | NEW to NTID | **Total** | From  Year 2 | From  Year 3 | **Total** |  |
| 1 | 1 | 6 | **8** | 6 | 5 | **11** | **19** | 1 | 1 | 7 | **9** | 5 | 8 | **13** | **22** |
| 1 | 1 | 6 | **8** | 0 | 6 | **6** | **14** | 1 | 1 | 7 | **9** | 0 | 7 | **7** | **16** |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Year 5** | | | | | | | |
| **Enroll 10 Students** | | | | **Persisting** | | | **Total per Semester** |
| Internal Transfer | Would come to NTID w/o program | NEW to NTID | **Total** | From  year 3 | From  Year 4 | **Total** |  |
| 1 | 1 | 8 | **10** | 6 | 9 | **15** | **25** |
| 1 | 1 | 8 | **10** | 0 | 8 | **8** | **18** |

**APPENDIX B: Projected Graduation Rate by Richard Dirmyer**

As part of the proposed NTID Culinary Arts AOS degree program, expected graduation rates were developed considering the following deaf and hard-of-hearing cohorts:

* NTID AOS program students, and separately;
* NTID CIMT AOS program students

These two cohorts come closest to representing the aspects about the proposed program, justifying the expected graduation rates proposed. The NTID CIMT AOS degree program is similarly unique to the proposed program, in that it is the only other NTID AOS program without an AAS track.

In an effort to moderate the observed variation in graduation rates, three-year averages were calculated. Consideration for a six-year interval is entirely a function of allowing any student who transfers, prior to completing the associate degree, to four-year baccalaureate programs, a complete 150% of their program’s designed length of time to graduate. Otherwise, students remaining in this associate degree program for their academic career will be counted as graduated or not, at 2.5\*150%, given the program’s designed length of 5 semesters.

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| Graduation Rates (Three Year Weighted Average) |
|  | Six-Year |
| NTID AOS program students | 35.74% |
| NTID CIMT AOS program students | \*\*\* |

The NTID CIMT AOS program contains cohort sizes that are very small, although graduation rates are among the highest of AOS programs. Based on the three-year weighted averages above, it would seem reasonable to expect a graduation rate of approximately 40.00%, to be evaluated on an annual basis beginning with the third cohort of incoming students.

The expected graduation rates for the first five cohorts of incoming students in the Culinary Arts program follow:

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| --- | --- |
| Fall Cohort | AOS |
| 2019 | 40% |
| 2020 | 40% |
| 2021 | 40%\* |
| 2022 | 40%\* |
| 2023 | 40%\* |

\*To be reviewed annually