



NEW UNITS OF INSTRUCTION AT PUBLIC COMMUNITY COLLEGES

Submitted for: Action.

Summary: This item requests approval of three new associate degree programs to be

offered at three community colleges.

Action Requested: That the Illinois Board of Higher Education approves the following

programs at the colleges indicated:

College of DuPage

• Associate of Applied Science in Artificial Intelligence

Lake Land College

• Associate of Applied Science in Culinary Arts

Southwestern Illinois College

• Associate of Applied Science in Dental Hygiene

STATE OF ILLINOIS BOARD OF HIGHER EDUCATION

NEW UNITS OF INSTRUCTION AT PUBLIC COMMUNITY COLLEGES

By statute, the Illinois Board of Higher Education (IBHE) is responsible for approving new associate degree programs proposed by public community colleges. The Board's approval criteria, defined in administrative rules, address relevance to college mission, academic control, faculty and staff, support services, financial resources, student demand, employer demand, curriculum, and congruence with IBHE policies and priorities. Before a recommendation for approval of an associate degree program is submitted to the IBHE for approval, staff of the IBHE and the Illinois Community College Board review the proposal. Once agreement is reached on a proposal having met the approval criteria, a recommendation for approval is presented to each board. In addition to the approval criteria in rules, each new program was reviewed for its contributions to the goals of the higher education strategic plan, A Thriving Illinois: Higher Education Paths to Equity, Sustainability, and Growth, which sets forth priorities to guide Illinois higher education. Staff recommendations are based on analyses of application materials and responses to staff questions.

Executive Summary

College of DuPage

Associate of Applied Science in Artificial Intelligence

The College of DuPage is seeking approval for a 62-credit hour Associate of Applied Science (AAS) in Artificial Intelligence. The program will prepare students for entry-level employment and advancement opportunities in tech-driven industries as technicians or analysts who can support Artificial Intelligence (AI)-driven projects, analyze data, and assist in the development and maintenance of AI systems. The curriculum requires 20 credit hours of general education coursework and 42 credit hours of career and technical education coursework. Career and technical coursework includes instruction in AI essentials, AI ethics, AI security, AI deep learning, programming logic and technique, introductory Machine Learning, data analytics and visualization, introductory Python programming, Standard Query Language (SQL), and a choice of related electives focused on programming, data visualization, or generative AI. Assessment of student learning will be achieved through the evaluation of student performance on the capstone project which incorporates experiential/work-based learning experiences through a real-world project associated with a local industry partner.

Approval request summary, including staff conclusion, follows in Attachment ****.

Lake Land College

Associate of Applied Science in Culinary Arts

Lake Land College is seeking approval for a 60-credit hour Associate of Applied Science (AAS) in Culinary Arts. This program will prepare students from the Illinois Department of Corrections

(IDOC) for entry-level employment and advancement opportunities in cooking, management, and operations within the culinary industry. The curriculum requires 19 credit hours of general education coursework and 41 credit hours of career and technical education coursework. The career and technical coursework includes instruction in culinary professional arts, culinary fundamentals, meat/poultry/fish preparation, introductory and intermediate baking, specialty foods, food presentation, sanitation and safety, culinary nutrition, culinary customer service, cost and portion management, and food service operations and management. Assessment of student learning will be achieved through the evaluation of student performance by program faculty. Students will complete three assessment instruments per course in the program.

Approval request summary, including staff conclusion, follows in Attachment ****.

Southwestern Illinois College

Associate of Applied Science in Dental Hygiene

Southwestern Illinois College is seeking approval for a 66-credit hour Associate of Applied Science (AAS) in Dental Hygiene. The program will prepare students for entry-level employment as dental hygienists in a variety of dental healthcare environments. The curriculum requires 15 credit hours of general education coursework and 51 credit hours of career and technical education coursework. The program adheres to the education and training requirements of modern practice for dental hygienists within the scope of the Illinois Dental Practice Act, and under the guidance of the Commission on Dental Accreditation (CODA) of the American Dental Association (ADA) and will prepare students for the National Board Dental Hygiene Examination (NBDHE) and licensure in Illinois as a Registered Dental Hygienist (RDH). Assessment of student learning will be achieved through the evaluation of student performance during the clinical practicum by program faculty.

Approval request summary, including staff conclusion, follows in Attachment ****.

The staff recommends adoption of the following resolutions:

The Illinois Board of Higher Education hereby grants authority to the College of DuPage to offer the Associate of Applied Science in Artificial Intelligence, subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.

The Illinois Board of Higher Education hereby grants authority to Lake Land College to offer the Associate of Applied Science in Culinary Arts, subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.

The Illinois Board of Higher Education hereby grants authority to Southwestern Illinois College to offer the Associate of Applied Science in Dental Hygiene, subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.

College of DuPage 425 Fawell Blvd Glen Ellyn, IL 60137

President: Dr. Muddassir Siddiqi

Proposed Program Title: Associate of Applied Science in Artificial Intelligence

Program Purpose

The program prepares students for entry-level employment and advancement opportunities using Artificial Intelligence (AI) and Cloud Computing technology in a variety of settings.

Catalog Description

The Associate of Applied Science (AAS) in Artificial Intelligence provides students with a comprehensive understanding of AI technologies and their ethical implications. The curriculum covers core areas such as Machine Learning (ML), Deep Learning (DL), and Computer Vision (CV), providing hands-on experience with advanced algorithms. Students will delve into the ethical considerations of AI exploring the social impact and importance of fairness, accountability, and transparency. The program also emphasizes AI security, preparing students to develop and protect robust AI systems against vulnerabilities and threats. Students will be proficient in designing, implementing, and evaluating AI solutions across diverse applications, ready to participate in the rapidly evolving field of artificial intelligence.

Curricular Information

The curriculum requires 20 credit hours of general education coursework and 42 credit hours of career and technical education coursework. Career and technical coursework includes instruction in Al essentials, Al ethics, Al security, Al deep learning, programming logic and technique, introductory Machine Learning, data analytics and visualization, introductory Python programming, Standard Query Language (SQL), and a choice of related electives focused on programming, data visualization, or generative Al. Assessment of student learning will be achieved through the evaluation of student performance on the capstone project, which incorporates experiential/work-based learning experiences through a real-world project associated with a local industry partner.

Justification for Credit Hours Required for the Degree

The proposed program exceeds 60 credit hours to include an option for technical electives that will allow students to specialize and advance their skills in one of three areas identified by the College's Program Advisory Committee.

Accrediting Information

The College of DuPage (the College) is accredited by the Higher Learning Commission. No additional program accreditation is required to offer the proposed program.

Diversity, Equity and Inclusion Efforts

The College of DuPage is committed to equity strategies that involve closing gaps on who enrolls, persists, and completes programs in this field of study. The College currently utilizes multiple forms of outreach with underrepresented groups, including attendance at high school educational fairs and working with industry partners to identify and target underserved individuals who may be interested in the proposed program or related stackable programs. The College conducts outreach using multiple languages of the community including English and Spanish. Programs such as TRIO support and serve underrepresented student populations. The College continues its efforts to hire and retain a diverse faculty, staff, and administration through diversity, equity, and inclusion (DEI) professional development workshops and year-round support activities. The College will intentionally expose prospective and existing students to a diverse set of faculty within the classroom and provide opportunities for students to learn from professionals with diverse backgrounds who work within the industry.

Supporting Labor Market Data (including employer partners)

Labor market information supports student interest in the proposed field of study. According to the Illinois Department of Employment Security (IDES), growth in the computer industry is expected to increase by 9.23 percent statewide through 2032.

Table 1: Employer Partners

Employers	Location
Synergen, Inc.	Itasca, IL
Oak Street Health	Chicago, IL
Vail Systems	Deerfield, IL
The Smart Cube	Chicago, IL

Table 2: Projected Enrollments

AI AAS	First Year	Second Year	Third Year
Full-Time Enrollments:	35	50	60
Part-Time Enrollments:	15	25	40
Completions:	0	40	50

Financial and Budgetary Information

One existing full-time faculty member will be necessary to implement the program during the first year. Two additional part-time faculty will be added during the second year of the program. Qualified faculty will hold at least a bachelor's degree in Al, computer science, or closely related field; hold Al credentials such as a Customer and Account Information Systems (CAIS) specialist, a Certified Al Scientist, or a Certified Al Engineer from the Al Board of America (ARTiBA); and have at three to five years of work experience along with one year of teaching experience preferred. The program will be fiscally supported through student tuition and fees.

Table 3: Financial Information

	First Year	Second Year	Third Year
Faculty Costs	\$0	\$10,000	\$89,000
Administrator Costs	-	-	-
Other Personnel Costs	-	-	-

Equipment Costs	-	\$75,000	\$10,000
Library/LRC Costs	-	-	-
Facility Costs	-	-	-
Other	-	-	-
TOTAL NEW COSTS	\$0	\$85,000	\$99,000

Table 4: Faculty Requirements

	Firs	t Year	Seco	nd Year	Thi	rd Year
	<u>Full-time</u>	<u>Part-time</u>	<u>Full-time</u>	<u>Part-time</u>	<u>Full-time</u>	<u>Part-time</u>
New Faculty	0	0	0	2	1	0
Existing Faculty	1	0	1	0	1	2

Staff Conclusion

The College of DuPage and its proposed program meet the criteria to implement the Board of Higher Education Act (110 ILCS 205) as outlined in 23. III. Admin. Code 1050.30 and the Illinois Board of Higher Education policies pertaining to assessment and accreditation for licensure.

Lake Land College 5001 Lake Land Blvd Mattoon, IL 61938

President: Dr. Jonathan Bullock

Proposed Program Title: Associate of Applied Science in Culinary Arts

Program Purpose

The program prepares students from the Illinois Department of Corrections (IDOC) for entry-level employment and advancement opportunities in cooking, management, and operations within the culinary industry.

Catalog Description

The Associate of Applied Science (AAS) in Culinary Arts prepares students for entry-level positions in the culinary industry. The program focuses on the technical skills required to work in the culinary arts field. Students will develop additional general education skills to improve future employment advancement.

Curricular Information

The curriculum requires 19 credit hours of general education coursework and 41 credit hours of career and technical education coursework. The career and technical coursework includes instruction in culinary professional arts, culinary fundamentals, meat/poultry/fish preparation, introductory and intermediate baking, specialty foods, food presentation, sanitation and safety, culinary nutrition, culinary customer service, cost and portion management, and food service operations and management. General education coursework was identified by program developers as important for students to practice written, verbal, and non-verbal communication to be better prepared for a customer service-oriented industry, practice strategies to resolve conflict, learn how to work in a fast-paced environment, as well as learn mathematical skills that support an understanding of the significance of cost and inventory management. Assessment of student learning will be achieved through the evaluation of student performance by the College's IDOC program faculty. Students will complete three assessment instruments per course in the program.

Justification for Credit Hours Required for the Degree

N/A

Accrediting Information

Lake Land College (the College) is accredited by the Higher Learning Commission. No additional program accreditation is required to offer the proposed program.

Diversity, Equity and Inclusion Efforts

The College and IDOC collect demographic information on students in each program by semester. The proposed program will provide an additional credential opportunity for this disadvantaged population to assist in not only future employment but also more sustainable wages

over the course of their career well after they re-enter the workforce. Data such as course enrollments, completions, and assessment is regularly used to evaluate student success and instructional practices. Students are provided the opportunity to complete an exit interview upon leaving programs to provide feedback to improve future performance. All College correctional staff receive diversity training as part of the annual training requirements. The College will intentionally expose students to a diverse set of faculty within the classroom and provide opportunities for students to learn from professionals with diverse backgrounds who work within the industry. The College markets, recruits, and aims to hire a diverse set of faculty for all programs, including those associated with IDOC.

Supporting Labor Market Data (including employer partners)

Labor market information supports student interest in the proposed field of study. Employment in the culinary industry is generally accessible to individuals who have completed culinary arts programs through the Department of Corrections. According to the Illinois Department of Employment Security (IDES), overall growth in employment of occupations related to culinary arts and restaurant operations/management is expected to increase by 3.14 percent statewide through 2032.

Table 1: Employer Partners

Employer	Location
Illinois Department of Corrections	Dixon Correction Center, IL

Table 2: Projected Enrollments

Culinary Arts AAS	First Year	Second Year	Third Year
Full-Time Enrollments:	5	10	20
Part-Time Enrollments:	-	-	-
Completions:	3	6	13

Financial and Budgetary Information

Twelve existing full-time faculty will be necessary to implement the program. Full-time faculty will hold an Illinois Food Service Sanitation Managers Certification (FSSMC), three to five years of work experience in cooking and restaurant management, and one year of teaching experience preferred. Existing facilities and equipment are adequate to support the proposed program. Resources will be shared with existing programs as necessary. All costs are covered through grant funds from the Illinois Department of Corrections.

Table 3: Financial Information

	First Year	Second Year	Third Year
Faculty Costs	\$0	\$0	\$0
Administrator Costs	-	-	-
Other Personnel Costs	-	-	-
Equipment Costs	-	-	-
Library/LRC Costs	-	-	-
Facility Costs	-	-	-
Other	-	-	-

TOTAL NEW COSTS	\$0	\$ 0	\$ 0

Table 4: Faculty Requirements

	Firs	t Year	Seco	nd Year	Thi	rd Year
	<u>Full-time</u>	<u>Part-time</u>	<u>Full-time</u>	<u>Part-time</u>	<u>Full-time</u>	<u>Part-time</u>
New Faculty	0	0	0	0	0	0
Existing Faculty	12	0	12	0	12	0

Staff Conclusion

Lake Land College and its proposed program meet the criteria to implement the Board of Higher Education Act (110 ILCS 205) as outlined in 23. III. Admin. Code 1050.30 and the Illinois Board of Higher Education policies pertaining to assessment and accreditation for licensure.

Southwestern Illinois College 2500 Carlyle Avenue Belleville, IL 62221

President: Nick J. Mance

Proposed Program Title: Associate of Applied Science in Dental Hygiene

Program Purpose

The program will prepare students for entry-level employment as dental hygienists in a variety of dental healthcare environments.

Catalog Description

The Associate of Applied Science (AAS) in Dental Hygiene prepares students with specialized skills necessary for employment as dental hygienists. Emphasis is on patient treatment such as the removal of calculus, stains, and deposits from the teeth, prevention of oral disease, and the hygienist's role as a dental health educator.

Curricular Information

The curriculum requires 15 credit hours of general education coursework and 51 credit hours of career and technical education coursework. The career and technical coursework includes introductory/intermediate levels of dental science, infection control, dental materials and lab procedures, introductory/intermediate levels of chairside assisting, communication in healthcare, introductory/intermediate levels of dental lab procedures, dental software, body systems, pharmacology, oral pathology, introductory/intermediate levels of expanded functions, medical emergencies, preventative dentistry, dental radiography, oral pathology, periodontology, nutrition and dental health, community dental health, introductory/intermediate/advanced levels of dental hygiene, pain management, National Board Exam preparation, a required pre-clinical and clinical practicum in dental hygiene, as well as work-based learning in a practicing dental office. Assessment of student learning will be achieved through the evaluation of student performance during the clinical practicum by program faculty. The program will prepare students for the National Board Dental Hygiene Examination (NBDHE) and licensure in Illinois as a Registered Dental Hygienist (RDH).

The program adheres to the education and training requirements of modern practice for dental hygienists within the scope of the Illinois Dental Practice Act, and under the guidance of the Commission on Dental Accreditation (CODA) of the American Dental Association (ADA).

Justification for Credit Hours Required for the Degree

The proposed program exceeds 60 credit hours to incorporate the requirements for CODA accreditation including specific pre-clinical and clinical contact hours, as well as exam-preparation for the National Board Dental Hygiene Examination.

Accrediting Information

Southwestern Illinois College (the College) is accredited by the Higher Learning Commission. The College aims to attain CODA accreditation for the program. As such, the curriculum was designed to meet programmatic accreditation requirements and standards, including 300 clinical practice hours. CODA accreditation for the proposed program will allow students to transfer into CODA accredited dental hygiene bachelor's degree programs.

Diversity, Equity and Inclusion Efforts

The College is committed to equity strategies that involve closing gaps on who enrolls, persists, and completes programs in this field of study. The College utilizes multiple forms of outreach with underrepresented groups in an effort to increase enrollment, retention, and graduation rates. Targeted efforts include focusing on attracting, recruiting, and retaining a diverse population of students. Student services staff regularly provide information on access to support services including grants and scholarships for underrepresented and underserved students. The College continues its efforts to hire and retain a diverse faculty, staff, and administration through diversity, equity, and inclusion (DEI) training for search committees, advertising to diverse audiences, reviewing existing policies and practices, and providing access to DEI support activities throughout the year. The College will intentionally expose students to a diverse set of faculty within the classroom and provide opportunities for students to learn from individuals with diverse backgrounds who work within the industry.

Supporting Labor Market Data (including employer partners)

Labor market information supports student interest in the proposed field of study. According to the Illinois Department of Employment Security (IDES), employment of dental hygienists is projected to increase by 7.03 percent statewide through 2032.

Table 1: Employer Partners

Employers	Location	
Heartland Dental Group	Effingham, IL	
Aspen Dental Group	Belleville, IL	
Stone Falls Dental Care	O'Fallon, IL	

Table 2: Projected Enrollments

Dental Hygiene AAS	First Year	Second Year	Third Year
Full-Time Enrollments:	10	15	20
Part-Time Enrollments:	-	-	-
Completions:	-	10	15

Financial and Budgetary Information

Two new faculty members (one full-time and one part-time) will be hired to implement the program. The program administrator and instructors of didactic coursework must hold a bachelor's degree in the field and a current Registered Dental Hygienist (RDH) credential. Program faculty overseeing laboratory, pre-clinical or clinical coursework must hold at least an associate degree in dental assisting and a current Certified Dental Assistant (CDA) credential. All faculty must have at

least two years of occupational experience in the field, and one year of teaching experience preferred. The program will utilize educational funds to cover costs during the first three years and will otherwise be fiscally supported through student tuition and fees.

Table 3: Financial Information

	First Year	Second Year	Third Year
Faculty Costs	\$50,441	\$6,000	\$0
Administrator Costs	-	-	-
Other Personnel Costs	-	-	-
Equipment Costs	\$11 <i>5</i> , 234	-	-
Library/LRC Costs	-	-	-
Facility Costs	-	-	-
Other (specify)	-	-	-
TOTAL NEW COSTS	\$165,675	\$6,000	\$ 0

Table 4: Faculty Requirements

	First Year		Second Year		Third Year	
	<u>Full-time</u>	<u>Part-time</u>	<u>Full-time</u>	<u>Part-time</u>	<u>Full-time</u>	<u>Part-time</u>
New Faculty	1	0	0	1	0	0
Existing Faculty	0	0	1	0	1	1

Staff Conclusion

Southwestern Illinois College and its proposed program meet the criteria to implement the Board of Higher Education Act (110 ILCS 205) as outlined in 23. Ill. Admin. Code 1050.30 and the Illinois Board of Higher Education policies pertaining to assessment and accreditation for licensure.