



LOUISIANA'S COMMUNITY & TECHNICAL COLLEGE SYSTEM

Program Health Index Report

Part A: Program Information

COLLEGE:	Northshore Technical Community College	YEAR IN REVIEW:	2021-2022	
PROGRAM CIP CODE:	470201	CREDIT HOURS:	45	CONTACT HOURS: N/A
PROGRAM TITLE:	Air Conditioning & Refrigeration	PROGRAM SOC CODE:	49-9021	
LINK FROM WEBSITE/CATALOG TO CURRICULUM:	Program Catalog Link			

CAMPUSES OFFERING PROGRAM

<input type="checkbox"/> MAIN CAMPUS <input type="checkbox"/> ALL CAMPUSES <input checked="" type="checkbox"/> SITES (LIST BELOW) <input type="checkbox"/> DISTANCE LEARNING
1. Hammond Campus 2. Lacombe Campus 3. Sullivan Campus

PROGRAM STAR RATING

<input checked="" type="checkbox"/> 5 Stars <input type="checkbox"/> 4 Stars <input type="checkbox"/> 3 Stars <input type="checkbox"/> 2 Stars <input type="checkbox"/> 1 Star
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AWARDS OFFERED

Award Level(s): <input type="checkbox"/> Associate of Applied Science (A.A.S.) <input type="checkbox"/> Associate of Science (A.S.) <input type="checkbox"/> Associate of Arts (A.A.) <input type="checkbox"/> Other Associate Degree Name: <input style="width: 50px;" type="text"/>	<input checked="" type="checkbox"/> Technical Diploma (T.D.) <input checked="" type="checkbox"/> Career and Technical Certificate (C.T.C.) <input checked="" type="checkbox"/> Certificate of Technical Studies (C.T.S.) <input type="checkbox"/> Certificate of Applied Science (C.A.S.) <input type="checkbox"/> Certificate of General Studies (C.G.S.)
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SECTION 1: ENROLLMENT, RETENTION, AND COMPLETION

AY		# STUDENTS ENROLLED		DISCUSS ENROLLMENT HISTORY AND ENROLLMENT FOR PROGRAM SUSTAINABILITY (IF INCREASED, INCLUDE EVIDENCE OF CONTRIBUTING FACTORS/IF DECREASED, DISCUSS RATIONALE AND IMPLEMENTATION PLANS FOR IMPACT)
2021-2022		113	+30% (from baseline)	
2020-2021		103	+18% (from baseline)	
2019-2020		87	Baseline	

DISCUSS ENROLLMENT TRENDS

The Air Conditioning & Refrigeration program experienced a 30% change increase in enrollment from year one to year three.

Recruitment initiatives include NTCC attendance at college fairs targeted at high school students and the general public, utilization of Recruit software to communicate with prospective students, hosting on-campus open house events that highlight our various programming, supplementing recruitment efforts with the use of social media as well as other forms of media and advertisement. Additionally, college-wide admissions and recruitment efforts are overseen by our Director of Admission. Lastly, NTCC's strategic plan focuses on realizing institutional goals and objectives directly related to program expansion and student achievement. Taken together, these efforts are expected to positively impact program enrollment.

Source: IPEDS 12 Month Unduplicated Enrollment; Summer semester leading

Note: Students may change majors throughout the academic year. To account for this, students' major (as coded in Banner) as of their term last enrolled was used.

ENTER GRADUATES BY AWARD TYPE*

AY	Associate	Diploma	Certificate	CTC (A1)	"Pre" programs	Total (unduplicated) Completers
2021-2022	-	21	2	28	N/A	51
2020-2021	-	19	5	30		54
2019-2020	-	18	3	20		41

TOTAL CREDENTIALS AWARDED**

AY	Associate	Diploma	Certificate	CTC	Total Awards
2021-2022	-	21	24	34	79
2020-2021	-	19	29	31	79
2019-2020	-	18	22	22	62

DISCUSS COMPLETION TRENDS

*Completer/Graduate number is unduplicated by highest credential earned, meaning that each student is counted once, regardless of the number of credentials earned within a given year.

Listed below is the total number of unduplicated completers/graduates per academic year, across all award types:

AY 2021-2022: 51

AY 2020-2021: 54

AY 2019-2020: 41

The total unduplicated, number of program completers each academic year has fluctuated. The number of completers has remained steady showing increases from year 1 to year 3. Over the specified three-year period, the program has completed an average of 49 students annually.

**Total Credentials Awarded indicates the total number of program credentials awarded within a given academic year. This number is duplicated; meaning that a student may have been awarded more than one credential within a given program within an academic year.

FALL TO SPRING RETENTION		
AY	# OF STUDENTS RETAINED	% OF STUDENTS RETAINED
Fall 2021 to Spring 2022	18 (out of 23)	78%
Fall 2020 to Spring 2021	13 (out of 15)	87%
Fall 2019 to Spring 2020	12 (out of 19)	63%
Three-year average:		76%

Source: State Operational Plan

Note: Data represent the percentage of first-time, full-time, degree seeking students enrolled during a given fall semester who returned to the College in the following spring semester. Students who transferred in the Spring semester were excluded from retention calculations.

AVERAGE TOTAL COST OF ATTENDANCE FOR STUDENTS IN PROGRAM		
2021-2022	Associate	-
	Diploma	\$6,304.56
	Certificate	\$4,203.04

Program cost of attendance is based on completion of the program at the indicated exit level by a full-time student enrolled in 12-15 credit hours per semester. Tuition & Fees for students enrolled in 12-15 credit hours = \$2,101.52.

AVERAGE MONTHS TO COMPLETION BY AWARD TYPE				
	Associate	Diploma	Certificate	CTC
	24 months/4 semesters	18 months/3 semesters	12 months/2 semesters	5 months/1 semester

# CREDIT & CLOCK HOURS TO COMPLETION BY AWARD TYPE					
Associate-Credit	N/A	Diploma-Credit	45	Certificate-Credit	21
Associate-Clock	N/A	Diploma-Clock	N/A	Certificate-Clock	N/A

SECTION 2: JOB DEMAND, PLACEMENT, AND TRANSFERS

	EMPLOYMENT OPPORTUNITIES UPON EXIT PER AWARD LEVEL	AVERAGE LOCAL SALARY*	AVERAGE STATE SALARY*
Associate	Heating, Air Conditioning, & Refrigeration Mechanics & Installers (49-9021)	\$47,749 (HAM-MSA) +	\$49,941
Diploma		\$50,024 (NO-MSA) +	
Certificate	N/A		
CTC (A1 or A2)			
SHORT-TERM ANNUAL DEMAND FOR GRADUATES**:		989	
LONG-TERM ANNUAL DEMAND FOR GRADUATES**:		439	

*Average salary data retrieved from Louisiana Workforce Commission, Wages and Labor Data, LMI Statistics, Occupational Wage Data (2021)
https://www.laworks.net/LaborMarketInfo/LMI_WageDataMap2009toPresent.asp?Year=2021

+ HAM-MSA = Hammond Metropolitan Statistical Area

+ NO-MSA = New Orleans Metropolitan Statistical Area

** Number represents the estimated number of job openings annually. Demand data retrieved from Louisiana Workforce Commission, Wages & Labor Data, LMI Statistics, Projections by Occupation and Industry, Statewide Short-term Occupational Projections for All Occupations to 2023, Statewide Long-term Occupational Projections for All Occupations to 2030.

https://www.laworks.net/LaborMarketInfo/LMI_OccAllProj_short.asp?years=20212023
https://www.laworks.net/LaborMarketInfo/LMI_OccAllProj.asp?years=20202030

INCLUDE MOST RECENT AND HISTORICAL NUMBER OF TRANSFERS (IF APPLICABLE) AND THE INSTITUTION OF TRANSFER

	# STUDENTS TRANSFERRING
	Program not intended for transfer.

SECTION 3: REVENUE AND COSTS

COST TO COLLEGE TO OFFER PROGRAM (MOST RECENT FY):	\$261,521.00
TOTAL REVENUE GENERATED FROM PROGRAM (MOST RECENT FY):	\$352,198.80
REVENUE MINUS COST (NET REVENUE):	\$90,677.80

*Cost to college obtained from NTCC Operating Budget Booklet, BOR-4, Total Costs by Function

**Total program revenue obtained from Tuition Fee Income Data by CIP Cognos report. Report excludes waivers from revenue generated totals.

Note: The total program revenue amount only includes revenue generated from student tuition and fees and does not take into account other sources of program revenue (e.g. state appropriations).

SECTION 4: PARTNERSHIPS AND ADVISORY COMMITTEE (IF APPLICABLE)

Business Name	College Program	Serves on an Advisory Committee	Hires Graduates	Donates Resources	Provides Scholarships	Provides Internships to Students / Graduates	Engages in Contact Training	New Program Creation	Other (list)
1. Star Services	HVAC	X	X			X			
2. Professional Heating and Air	HVAC	X	X			X			X
3. AIR Pro Heating & Cooling LLC	HVAC	X	X			X	X		
4. Corkern AC Heating and Electric	HVAC	X	X			X			
5. Oalmann AC and Heat	HVAC	X	X			X			
6. The Energy Conservatory	HVAC	X		X			X		
7. Enviro	HVAC	X	X			X			
8. Computrols	HVAC			X					

SECTION 5: PROGRAM ASSESSMENT

List program goals for enrollment, completion, and retention for the next 3 years.

1. Enrollment Goal: 4% change increase in enrollment
 - a. From 113 students enrolled in 2021-2022 to 118 students enrolled by 2024-2025
2. Completion Goal: Increase number of unduplicated completers.
 - a. From 51 completers in 2021-2022 to 60 completers by 2024-2025
3. Retention Goal: 2% point increase in fall to spring retention
 - a. From 78% retained in 2021-2022 to 80% retained by 2024-2025

Discuss Program Learning Outcomes (PLOs) and address what are they, how are they measured (final capstone course, standardized exam, etc..) and the process for re-evaluation (frequency of assessment). Please indicate which national standard (if any) you are using to establish program learning outcomes.

1. Program Learning Outcomes (PLOs):
 - Evaluate system performance using pressure and temperature measurements.
 - Interpret technical drawings to determine system configuration and sequence of operation.
 - Produce system performance analysis and present results.
 - Detect faults in an operational system and present solutions.
 - Facilitate service requests effectively and efficiently through a commitment to high standards of professionalism.
2. Indicate how you are measuring PLOs:
 - NTCC faculty members and Associate Provosts develop program-level operational outcomes and student learning outcomes for each educational program offered by the college. Programs of study at NTCC have a minimum of five program-level student learning outcomes. Multiple measures are adopted for each program-level student learning outcome, one of which must be a direct measure of learning (i.e. as the results of an exam).
3. PLO Frequency of assessment:
 - Assessment is conducted over a two-year period. A formative report is submitted after the conclusion of the first year within a cycle to document progress related to student achievement. At the conclusion of the two-year cycle, a summative report is submitted for each program which analyzes assessment findings as well as documents results and evidence. Upon the close of a cycle, faculty develop and implement action plans that seek to improve teaching and learning within the program related to achievement of each program-level student learning outcome.
4. Indicate National Standard used to establish PLOs (if applicable)

Part B: Program Recommendations

RECOMMENDATIONS
CHANCELLOR / DIRECTOR RECOMMENDATION ON PROGRAM <u>CONTINUE</u> , MODIFY, TERMINATE, OR EXPAND
INCLUDE MOST RECENT PROGRAM HEALTH INDEX REPORT WITH RECOMMENDATIONS (IF RECOMMENDATIONS WERE MADE)
N/A; no recommendations were made.
PROVIDE A SHORT NARRATIVE THAT INCLUDES THE PROGRAM'S PLAN FOR ADDRESSING EACH RECOMMENDATION (IF APPLICABLE)

SIGNATURES:


College Chief Executive Officer

3/29/23
Date