# THE UNIVERSITY OF AKRON

**University Retention and Completion Plan**

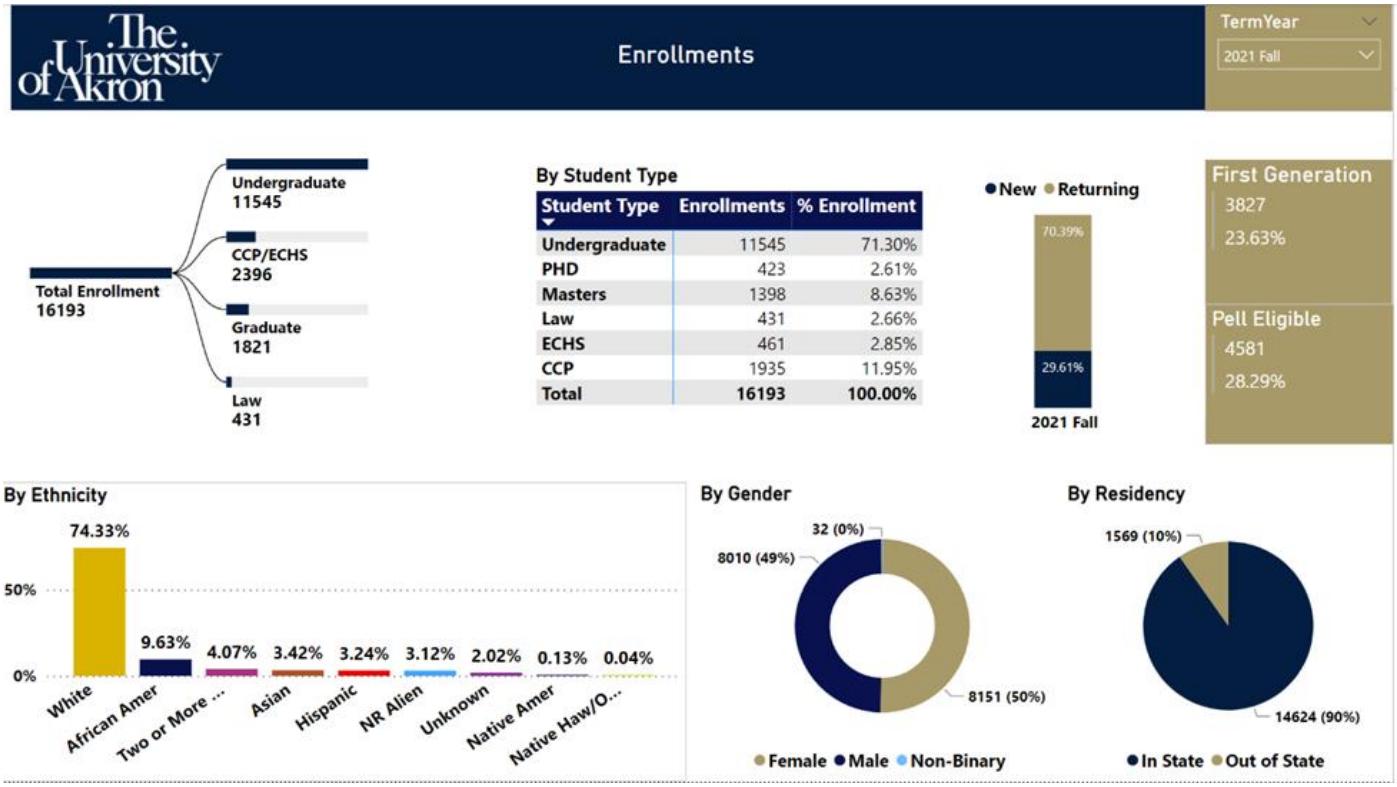
## UNIVERSITY MISSION

The University of Akron (UA), a publicly assisted metropolitan institution, strives to develop enlightened members of society, offers comprehensive programs of instruction from associate through doctoral levels; pursues a vigorous agenda of research in the arts, sciences, and professions; and provides service to the community. The university pursues excellence in undergraduate education and distinction in selected areas of graduate instruction, inquiry, and creative activity.

## STUDENT BODY PROFILE

The University offers many programs from associate degrees to doctoral degrees of varying competitiveness, to world-ranked graduate programs. Total UA enrollment for fall 2021 was 16,193: 13,941 undergraduates, 1,821 graduate students and 431 law (2,252 combined graduate and professional).

- Full-time students made up 71.99% of the student body; part-time students, 28.01%.
- Ethnically underrepresented (African American, American Indian, Asian American, Hispanic American, Native Hawaiian, two or more races, and non-resident alien) students made up 25.67% of the student body.
- Adults (25 years and older) made up 13.5% of the undergraduate population.
- First-generation students represented approximately:
  - First Generation undergraduates *(excluding CCP/ECHS)*: 3223 out of 11545 (27.92%)
  - First Generation first-time freshmen: 711 out of 2340 (30.38%)
- 4209 (36.46%) of our undergraduate (*excluding CCP/ECHS*) students were Pell eligible.
  - 989 (42 %) of first-time freshman



The faculty and staff at The University of Akron value student development and academic success above all other goals. As a metropolitan university, Akron is experiencing many of the challenges that higher education faces today, particularly for public institutions that are inclusive in nature.

The impact of the COVID-19 pandemic has directly impacted student success pathways and will have lasting impact on the student experience.

The retention and completion strategies selected for this document have been chosen based upon the following principles:

1. Accepts a broad range of student-preparedness levels
2. Strives for inclusive excellence to support a diverse population of students
3. Strengthens support frameworks and resource programs to reach the depth and breadth of preparedness
4. Increases focus on retention and completion with particular attention to the student's first year, where most attrition occurs
5. Develops and implements specific strategies selected based upon best practices and literature review of student development and persistence for the diverse population of students we serve.

**BARRIERS TO PERSISTENCE AND COMPLETION**

**1. COVID Impact**

At the onset of the 2020 plan, the impact of COVID on student success variables was unknown. Retention and persistence data included in this report show the dramatic impact on retention the pandemic had on increasingly successful initiatives. Trajectory must emphasize COVID recovery for students.

**2. Pell Eligibility**

The University's significant percentage of Pell-eligible students faces challenges in both the transition to and persistence through college. Approximately 28.29% of our students are Pell-eligible attendees. The retention and completion goals of this plan offer a clear vision for improving student academic success and eliminating the barriers to completion at the University, with great attention to this group of students.

**3. First Generation**

The University's significant percentage of first-generation students faces challenges in both the transition to and persistence through college. Approximately 27.92% of our undergraduate students are first–generation college attendees (30.38% of first-time freshman). Throughout this plan, several engagement strategies will be outlined to increase first-year retention, persistence to degree and career placement that are designed to meet the specific needs of this sector.

**4. Academic Preparedness**

The Fall 2021 first-time, full-time new freshman cohort included 2280 students. In Fall 2021, the median high school grade point average for first-time freshman was a 3.46, with median ACT of 22, and SAT of 1060. In Fall 2020, the median high school grade point average for first-time freshman was a 3.49, with median ACT of 22, and SAT of 1070. For the 2021 fall semester, the following data represents first-year, domestic students at the Akron campus only.

2081 students enrolled

- 794 were direct admits (38% of class)
- 789 were college ready admits (37.9% of class)
- 498 were emergent admits (23.9% of class)

*Direct and college-ready students (both directly admitted to an academic program of study, and those of higher preparedness who need to fulfill additional requirements at the institution as a pre-admission student)*

- Pathway admission based upon a sliding scale by high school coursework, high school grade point average, and standardized test scores (ACT/SAT). Students admitted with a higher academic profile are admitted directly to their academic program of study.
- Demonstration of high achievement throughout high-school and ready to pursue academically challenging coursework that leads directly to degree completion.

*Emergent students include those admitted to the University with a requirement of completing a set of prescribed courses and/or activities during their first year of enrollment as a condition of further enrollment and admission to an academic program of study.*

- Pathway admission based upon a sliding scale by high school coursework, high school grade point average, and standardized test scores (ACT/SAT).
- High school GPA demonstrates the ability and desire to achieve through personal effort, benefitting from admittance as pre-majors and the receipt of intentional, intensive, and if necessary, intrusive support for major readiness.

Students applying to The University of Akron for the 2021 fall semester, had the option of applying test-optional for consideration for admission, merit scholarships and admission/scholarships for the Williams Honors College. Fifty-nine percent of the students who applied to The University of Akron for the 2021 fall semester chose to apply test optional. Students applying to UA for all upcoming terms will continue to have the opportunity to apply test optional.

In evaluation of the last three years of placement testing data, math placement testing is the highest need for incoming students. In 2021, over half of the incoming students required placement testing (68.8%); 94.4% of students selected for testing are selected for math testing. From 2017 to 2019, the need for overall testing dropped, which may be attributed to higher admissions criteria (65.5% to 56.3%). After adopting a test optional admission policy in 2020, the need for testing increased from 56.3% in 2019 to 68.8% in 2021. Additionally, the volume of students needing more than one placement test has increased more than 20%, from 42.5% in 2019 to 63.2% in 2021.

Placement Testing Evaluations for Incoming Freshman by Year:

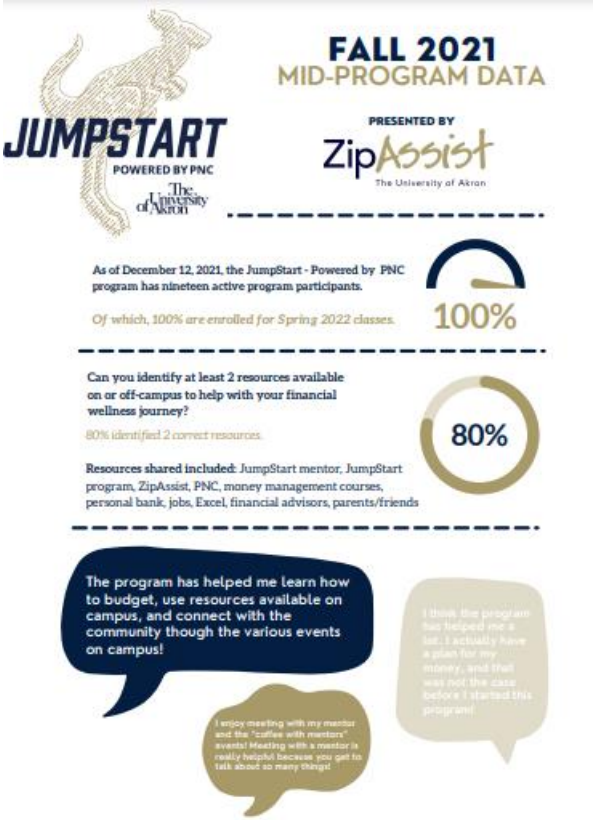
| | **2017** | **2018** | **2019** | **2020** | **2021** |
|---|---|---|---|---|---|
| **Total Students Evaluated for Testing** | 3,628 | 3,277 | 3,131 | 2,874 | 2,487 |
| No Testing Required | 1,252 (34.5%) | 1,448 (44.2%) | 1,368 (43.7%) | 1,165 (40.5%) | 776 (31.2%) |
| Testing Required | 2,376 (65.5%) | 1,829 (55.8%) | 1,763 (56.3%) | 1,709 (59.5%) | 1,711 (68.8) |
| *Math Testing* | 2,164 (91.1%) | 1,620 (88.6%) | 1,574 (89.3%) | 1,571 (91.9%) | 1,615 (94.4%) |
| *2 or more areas* | 1,198 (50.4%) | 817 (44.7.9%) | 750 (42.5%) | 834 (48.8%) | 1,082 (63.2%) |

## 5. Financial Literacy and Management

Because we have many students who are Pell Grant eligible and the first generation in their families to seek post-secondary education, they arrive at the University with limited financial literacy skills. The challenges here are most apparent about financial aid regulations, regular budget management and the utilization of refunds for college related expenses. It is evident that we must provide education and support to these students to enhance and enrich their financial literacy skills to forestall potential issues with debt, personal finances, and student loan repayment. On the heels of the Student Emergency Financial Assistance [SEFA] grant, launched in 2017, the University's approach to financial literacy education broadened. In collaboration with Student Financial Aid, new programs were created to educate students on basic money management and budget.

Now, in addition to educating new students and parents on scholarships, loans, and grants, all students have access to free, confidential financial coaching, classroom-hosted workshops (focused on refund usage, income/debt ratio, and budget control), dedicated mentorship programs, nationally recognized financial wellness speakers, and monthly webinars and workshops. Collaborations with local business leaders, organizations, and nationally recognized literacy training tools equip students with solutions and resource-driven approaches to fiscal management.

An example of community partnerships is the JumpStart-Powered by PNC financial literacy education program, organized through the University's student advocacy and support office, ZipAssist. Focused on a cohort of first-generation, Pell-eligible students, this program brings together mentorship with access to technology and financial wellness education to create a three-pronged approach to student success. Started through an external pilot grant in August 2020, ZipAssist program assessment indicates increases in learning, community-building, and retention.



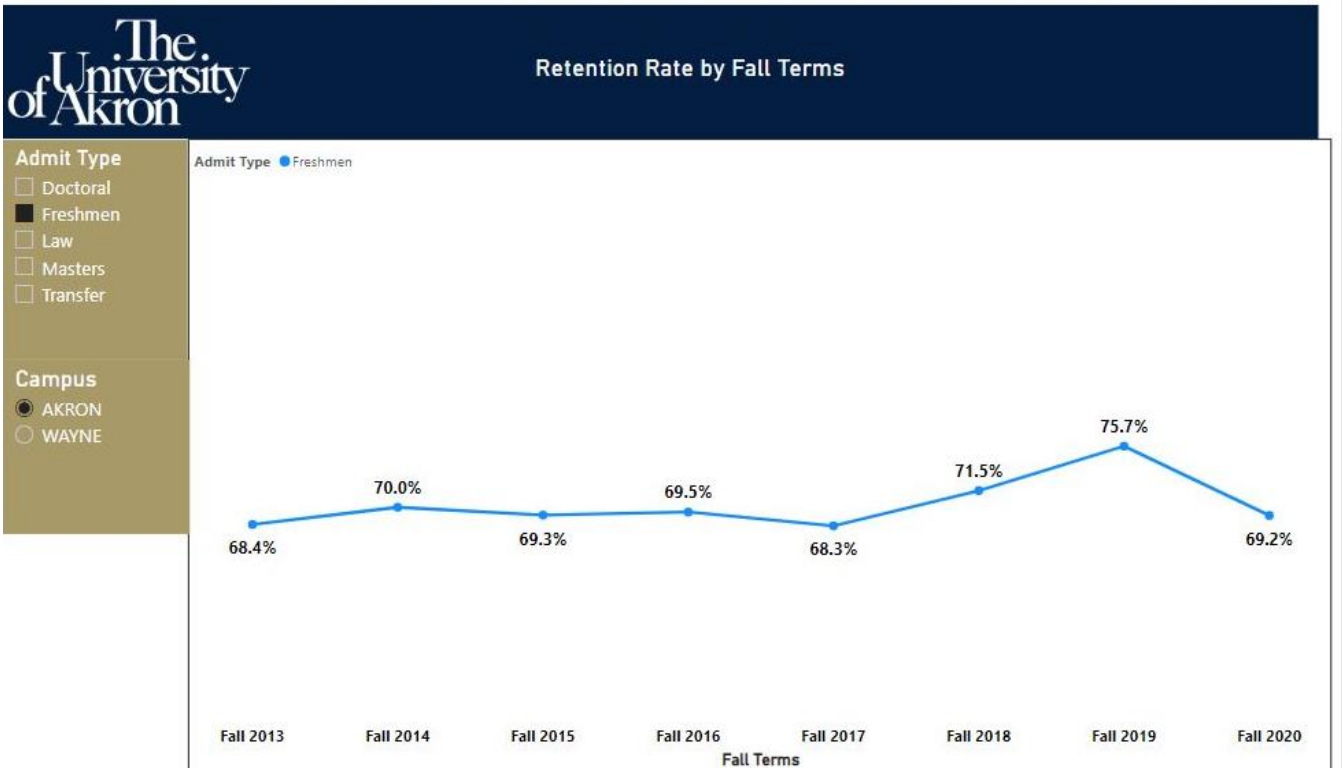
6. **Part-time Enrollment**

Over **4903** of our students attend part time (**30.2%** of total enrollment) and many juggle work and family responsibilities. In Ohio, part-time students seeking a bachelor's degree have eight-year graduation rates of less than 15% . This measurement does not include the challenges in timely degree completion and accurate tracking for students who earn credits from several institutions.

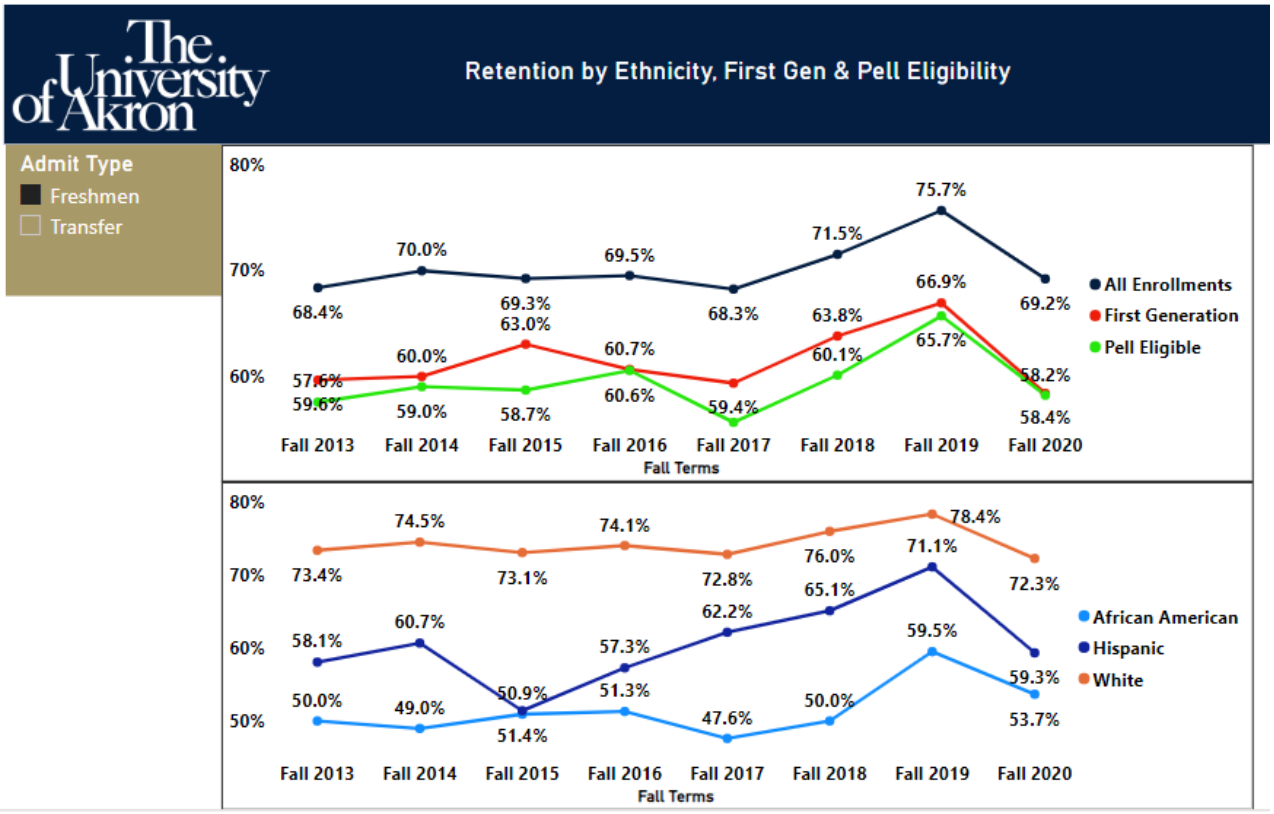
**PROGRESS TOWARD INITIAL RETENTION AND COMPLETION GOALS**

Our retention and completion goals were directly and negatively impacted by the COVID pandemic. Data below indicates challenges met across populations, widening gaps.

1. The first-year retention rate dropped 6.5% during the pandemic. The table below reflects the percentage of first year students who enrolled and attended the following fall.



2. Cohort achievement gaps, particularly in first-year retention, also reflected the impact of the pandemic.




3. Progress toward degree increased across all years until the pandemic, showing decline for the incoming class.

| Cohort Class Fall Term | Class Size | Year 1 | Year 2 | Year 3 |
|---|---|---|---|---|
| Fall 2013 | 3460 | 68.4% | 56.3% | 48.4% |
| Fall 2014 | 3542 | 70.0% | 57.8% | 50.7% |
| Fall 2015 | 3695 | 69.3% | 59.4% | 52.2% |
| Fall 2016 | 2905 | 69.5% | 57.3% | 49.3% |
| Fall 2017 | 3304 | 68.3% | 55.6% | 49.3% |
| Fall 2018 | 2723 | 71.5% | 62.3% | 54.3% |
| Fall 2019 | 2641 | 75.7% | 64.4% | |
| Fall 2020 | 2271 | 69.2% | | |

4. Four and six-year graduation rates have showed continued improvement. The current six-year graduation rate is improving with the 2015 six-year rate at 49% and the 2017 rate increasing to 27.15%. (first-time, full-time Akron Campus bachelor's degree seeking);

| Cohort Class Fall Terms | Class Size | 4 year | 5 year | 6 year |
|---|---|---|---|---|
| Fall 2013 | 3460 | 21.97% | 39.57% | 43.73% |
| Fall 2014 | 3542 | 24.42% | 43.45% | 47.74% |
| Fall 2015 | 3695 | 24.41% | 45.03% | 49.17% |
| Fall 2016 | 2905 | 24.99% | 43.10% | |
| Fall 2017 | 3304 | 27.15% | | |

5. The job/graduate school placement rate increased from 87% to 95%.

**Spring 2019, 2020, 2021 Career Outcomes Comparison Summary by College**
**Handshake First Destination Survey Results**

| Degree | College | Career Outcomes Rate % (previously named Overall Placement Rate) | | |
|---|---|---|---|---|
| | | **2019** | **2020** | **2021** |
| **Bachelors** | Buchtel College of Arts and Sciences | 88% | 86% | 88% |
| | College of Applied Science and Technology | 80% | 82% | n/a |
| | College of Business (formerly CBA) | 82% | 83% | 93% |
| | College of Education | 88% | 83% | n/a |
| | College of Engineering & Polymer Science (formerly COE) | 85% | 87% | 97% |
| | College of Health & Human Sciences (formerly COHP) | 93% | 87% | 94% |
| | **Bachelors Total** | **87%** | **86%** | **94%** |
| **Associates** | Buchtel College of Arts and Sciences | 100% | 86% | 99% |
| | College of Applied Science and Technology | 92% | 96% | n/a |
| | College of Engineering & Polymer Science (formerly COE) | n/a | n/a | 100% |
| | College of Health & Human Sciences (formerly COHP) | 89% | 100% | 0% |
| | Wayne College | 81% | 92% | n/a |
| | **Associates Total** | **91%** | **95%** | **99%** |
| **Grand** | **Bachelors and Associates Grand Total** | **87%** | **87%** | **95%** |

**RETENTION AND COMPLETION GOALS FOR 2022-2024**

In consideration of the critical challenges that the COVID-19 pandemic posed for University of Akron students, the University will seek to return to the gains achieved by the 2019 class. The academic and economic impact of the pandemic will be felt for several academic cycles.

Appreciating the recapturing these gains will be progressive in nature:

- Goal 1: Increase first year student retention 2% annually.
- Goal 2: Increase levels of completion and retention for first generation students, Pell- eligible students and traditionally underrepresented students by 3% annually.
- Goal 3: Maintain four-year graduation rates at 2017 level and six-year at 2015 level respectively.
- Goal 4: Maintain current levels of graduating student placement. Increase by 1% annually in colleges below institutional average. Continue to align career placement with focus on Ohio workforce development priorities

Our retention and completion goals for 2022-2024 are both aggressive and realistic and can be achieved through the following initiatives:

1. Enhance student support services and early alert initiatives to respond to students needing resources including crisis response and financial literacy (plus debt accumulation, repayment and regular budgeting);
2. Develop and implement a college-centered academic advising model that balances the program and career guidance and delineates course registration processes;
3. Design and launch programs that support degree progress that respond to broad preparedness levels;
4. Develop student engagement activities to address student connections, countering feelings of isolation, and supportive mental health, among others within current and possible future realities associated with social distancing and health priorities;
5. Increase efficiency in degree completion through revised class scheduling process; and specifically offering course options during times when students need them;
6. Address the needs of underrepresented students through intentional support including supplemental academic advising, learning communities and other strategic initiatives (such as racial equity and social justice);
7. Tailor the Akron Experience first-year seminar course to meet the specific programs in colleges and majors.
8. Assess execution of course delivery, campus support services, and new initiatives implemented as a result of COVID-19 to identify impact, gaps, and opportunities to continue practices/initiatives as a part of normal business practices; and
9. Expand experiential learning and research opportunities to all undergraduate programs.

**COMPLETION STRATEGIES**

1. **Pathways to Student Academic Success**

Our fall 2021 first-time, full-time (FTFT), bachelor's degree-seeking students had an average ACT of 22 and a 3.46 high school grade point average. Our student support begins in admissions and remains focused on increasing first-year retention and graduation rates.

In Fall 2020, we implemented the Akron Rising Scholars initiative. The program is designed to increase access to the university by reviewing students through a holistic review criterion who were previously denied admission to the university. The Holistic Review Committee reviews each applicant and evaluates admission based upon various criteria. These include:

- College Prep Track in previous high school coursework
- Grade Point Average trends
- ACT/SAT test scores
- Letters of recommendation
- Personal statements and/or Common App essay
- CCP coursework, if applicable
- Local six-county region

Students admitted through Akron Rising Scholars participate with additional and intentional wrap-around support and academic services, including Summer bridge, tutoring, access to a Retention Coordinator, among others.
Akron Rises Fall 2020 cohort

- Confirmed incoming students: 175
- Retained to Spring 2021: 110 students
- Retained to Fall 2021: 64 students
- Retained to Spring 2022: 45

Many of incoming students from the 2020-2021 academic year struggled with online classes (especially asynchronous classes) and social isolation and lack of college readiness.

Akron Rises Fall 2021 cohort

- Confirmed incoming students: 165
- Retained to Spring 2022: 107

Many of the incoming students from the 2021-2022 academic year struggled with classes and activities going back to being in person while also being overly confident in their online classroom skills. These students struggled with asynchronous classes and lack of college readiness.

All Akron Rises students have the 1-on-1 help from a retention coordinator to make goals and assist in connecting them to resources they may need, such as tutoring and Zip Assist. The students also receive specialized programing based on group needs such as study skill programing, how to apply and write scholarship essays, FAFSA help, and finals prep. Majority of the Akron Rises students also take an Akron Experience class that is catered toward the program initiative. A significant obstacle facing many students was financial obligations and relied on external employment to subsidize college costs.

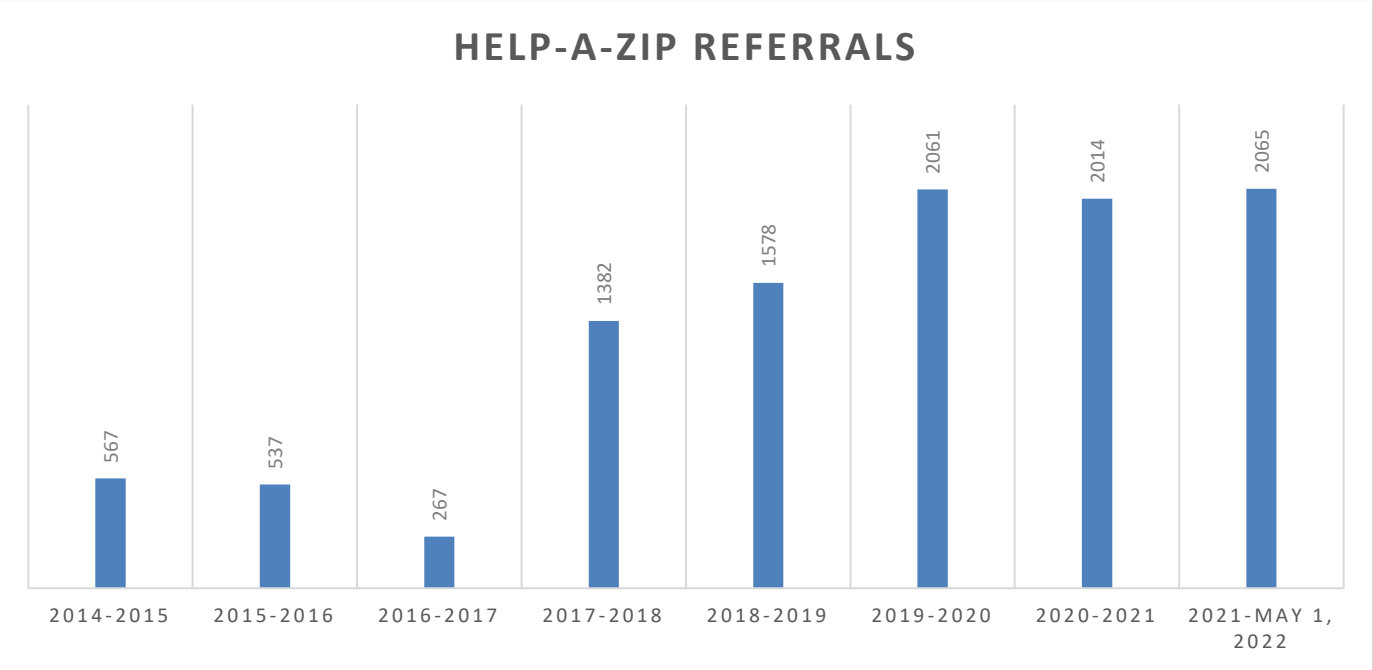
2. **Early Alert Initiatives**

*Help-A-Zip and ZipAssist*

ZipAssist serves as the University's multifaceted student advocacy and support office. The scope of ZipAssist was highlighted and broadened amid the COVID-19 pandemic as students and University community members sought additional resources and guidance for services outside the traditional scope of the University. ZipAssist currently operates a robust network of basic needs support, including the on-campus pantry program, Campus Cupboard. Recognizing the pivotal role that holistic wellbeing plays on a student's ability to succeed in the classroom, ZipAssist oversees several programs aimed at providing early intervention, connection, and guidance. An example of these initiatives/strategy includes financial literacy education, persistence grants, and several programs and partnerships focused on basic needs, emergency assistance/hardship, and general wellbeing.

The Help-A-Zip referral program was put in place in Fall 2015 to provide resources for students who are facing distress, looking for guidance, or are in jeopardy of leaving the University. Faculty, staff, parents, community members, peers, and students themselves can make a referral to ZipAssist on behalf of an enrolled student. A team of campus experts are then assigned to assist students with navigating University resources and finding needed services. Referrals are typically made for the following areas of concern: academic, personal/social, mental health, tuition/fees, emergency financial, and textbook assistance.

Through intentional communication and education to campus, the Help-A-Zip referral program experienced a 400% increase in FY18, as compared to the previous two years of the program. The success and utilization of the program has continued and since the beginning of the pandemic, the program experienced over a 30% growth. This increase has been sustained since spring 2020, with about 1,000 referrals submitted each semester.




During conversations with staff, students set goals, review Degree Progress Reports, discuss budgeting strategies, are provided campus/community resources and receive holistic mentorship. In addition to an initial meeting, each student referred will receive three points of outreach from the ZipAssist team.

While Help-A-Zip is intended as the University's specified intervention program, proactive early alert and retention efforts are also a focus for units such as ZipAssist, academic advising, and various student support offices. Regular communication and strategic data collection provide the University with data-driven opportunities for programming and communication strategies. Examples of these efforts include:

- Interim grades
- Progress reports
- Formal mentorship programs
- Probationary academic intervention
- Wellbeing education
- Reenrollment strategies
- Persistence grants

*Interim Progress Reports*

Research has demonstrated that the earlier students have contact with full-time faculty, the more likely they are

to remain in school and succeed. The combination of full-time faculty contact with professional advisor and staff guidance and intervention will improve retention and persistence. Although faculty and staff contact take many forms, measurable feedback in relation to student progress includes the use of early-term progress reports, primarily for the 100- and 200-level courses, where faculty enter satisfactory or unsatisfactory indicators during the second to fifth week of the term. With this information, degree-granting colleges and other advising units pull reports from the system to outreach to those students identified at-risk for failing a course(s). Outreach includes email and telephone calls to invite students in to discuss interventions and to create success toward those courses. Interventions include tutoring, office hours, additional academic advising appointments, and access to additional resources such as counseling. In addition, the University is developing strategic and consistent deployment and utilization of the Brightspace platform for grade keeping and communication with students.

3**. Student Emergency Financial Assistance (SEFA)**

In May 2017, the University was selected as a national recipient of a grant provided by the DASH Emergency Grant, supported by the Great Lakes Higher Education Corporation & Affiliates. The grant, now called the Student Emergency Financial Assistance (SEFA) program on campus, provides emergency assistance for undergraduate students facing unexpected hardships. Through a referral system, students work with Zip Assist staff to determine eligibility and resources available, both on campus and within the community. The program is aimed at supporting low-income students with an Expected Financial Contribution of $7,000 or less. The maximum grant a student can receive is $1,000 towards non-tuition related expenses. As a catalyst for change, the SEFA program has provided the institution with data necessary to expand programs and increase student support. Supplemental support programs, such as Campus Cupboard, financial literacy education, emergency job placement, community partnerships, JumpStart-Powered by PNC, and ZipsTech, were created because of concerns learned through student interventions with SEFA.

Through collaborative work with the Department of Development, fundraising efforts have sustained this and other emergency financial support programs. To date, this program has supported nearly 800 students with one-time assistance, amounting to over $558,000 in support. An analysis of the SEFA program's effectiveness confirms the program's success with over 98% of students remaining in higher education because of the emergency aid and intervention.

4. **Persistence Grants**

The retention and completion grant program targets a group of academically eligible students at risk of attrition. Retention & Completion Initiative Grants are administered through written recommendation and committee review. Colleagues in Student Financial Aid, ZipAssist, and Student Accounts review requests for completion funds based on the stated eligible guidelines. The committee review provides a streamlined and comprehensive assessment of the students' needs, knowing they may benefit from additional support (such as counseling, financial coaching, food assistance, social services, etc.). Students who may be eligible for funds (1) must be degree-seeking undergraduate students in good standing and (2) must have a FAFSA on file and stated needs [such as Pell-eligible]. Our research suggests the top two reasons students stop out of college are financial and personal issues. This model of wrap-around committee review provides various support units with the opportunity to make recommendations to students about additional resources or strategies for persistence.

Additionally, as is the case at institutions across the nation, most UA students who are dropped from classes for non-payment are in good academic standing and simply cannot return because of insufficient financing. For residential students, room and board balances exceeding $1,000 may hinder reenrollment. After thoughtful review of this emerging concern amid the pandemic, the University's Department of Development sought increased support for students living on campus with limited and maximized financial assistance. Structured similarly to Retention & Completion Initiative Grants, a committee of colleagues from Student Financial Aid, ZipAssist, Residence Life & Housing, and Development/Advancement reviewed student referrals related to outstanding debt from room and

board.

Amid the pandemic, the financial needs of students have increased and highlighted the unique circumstances of students. Unemployment, family financial obligations, gap employment, reduced hours, and health concerns are some of the concerns voiced by students. In AY22, nearly $200,000 was distributed to students in the form of Retention & Completion Initiative Grants and Room & Board Grants. Coupled with holistic mentorship and ongoing support, these initiatives show positive impacts on GPA, minimizing financial stress, and academic persistence.

5**. Developmental Academic Advising**

Academic advising transitioned into a decentralized system with an additional focus on a developmental model, intended to provide teaching, service, and one-on-one focus to every student. Consistent with college action plans, UA will continue to improve college-based student advising, with special attention to at-risk students. Changes to the academic reassessment policy, transient policy, and the Inter College Transfer policy which now allows students to transfer colleges while on academic probation have had a positive impact on academic advising which should hopefully lead to higher GPA's and quicker time to graduation for at-risk students.

A result of COVID is that academic advising can occur both virtually with similar outcomes as in-person advising. This change has had a positive impact on nontraditional students, online students and students working who were previously limited by in-person only appointments. This allows more students the flexibility to meet with an academic advisor in a timely manner.

During Fall 2021, the Office of Academic Affairs created a Task Force on Academic Advising. The results of the task force include the following: maintaining the college-based advising structure; creating a Student Success Center to include Exploratory Advising, Adult Focus and Akron RISES; examination of Akron Experience and Career Planning courses; a move towards full-year course scheduling; a collaborative planning process for Orientation; shift to all staff advising with faculty mentoring; and a review of academic advisor caseloads, responsibilities and compensation with benchmarks to national best practices.

6. **Zips Affordability Scholarship**

In 2021, the University introduced the Zips Affordability Scholarship (ZAS). This is a need-based scholarship awarded to students who have demonstrated, through completing the Free Application for Federal Student Aid (FAFSA), that they have an expected family contribution that is equal to or below the minimum required for Pell Grant eligibility. The scholarship is awarded to students who reside in the University's six-county service area including Cuyahoga, Medina, Portage, Stark, Summit, and Wayne counties.

The ZAS scholarship covers full tuition and general fee costs for students, after federal and state grants and institutionally awarded scholarships have been applied. This critical award ensures that the neediest students can meet the cost of tuition and general fees for four years if they remain eligible. This is a game changer for families who may struggle to meet educational costs. It gives them the confidence that tuition and general fees are paid, so that they can use other sources of financial aid to help with books and supplies, transportation, room, board, etc. Students can focus on their academic pursuits, without concern of how they will pay their tuition each semester. For students who choose to commute, rather than live on-campus, this effectively eliminates their direct costs at the University by providing free tuition for four years. his scholarship positively impacts retention by removing financial barriers for students.

In addition, the University continues to expand the reach of its Retention Initiative (RI) Grant by incorporating it into the referral process used by Zip Assist to identify students with outstanding balances who are prevented from registering for the next semester or who are poised to graduate. A committee that includes leaders from Zip Assist, Student Financial Aid and the Bursar's Office reviews requests and referrals and works collaboratively to eliminate student debt using the

RI Grant and other financial aid. This program is vital in helping students persist toward and complete their degree. There is also an adult/non-traditional student component of this program that is administered by the Adult Focus department.

### 7. First-Year Student Success Seminar

The University offers a student success course, The Akron Experience: University 101, that combines topics related to first-year experiences with career-planning elements to engage students early. The Akron Experience: University 101 is required of all new baccalaureate degree-seeking first-year students admitted on the emergent pathway, a pathway identified as being at higher risk academically. College-ready students are strongly encouraged to participate in this course. This course has further developed through the identification of clear, first-year student learning outcomes. The course has moved toward clear connections with the degree-granting college in which a student is majoring, allowing for exploration of major and career paths within those colleges, and access to those wrap-around services provided by the colleges. The course has further developed within the Learning Communities program through addressing the pertinent areas of campus resources, building academic and non-cognitive skill sets, and reinforcing the theme specific to each Learning Community. For Fall 2021, the College of Business (CoB) also approved a required one-credit hour Fall semester first-year seminar course for incoming FYR students called the CoB Success Seminar, as well as a one-credit hour Spring semester called CoB Professional Development Seminar.

While not explicitly assessed, retention data shifts since the beginning of the pandemic indicate a decline in student retention. Like most institutions in 2020 and early 2021, the method of course delivery shifted away from face-to-face classes out of caution and health guidance. In Fall 2020, the course was delivered in hybrid, synchronous, and asynchronous formats. Students struggled with the online delivery and asynchronous modality specifically. During the early part of the pandemic, the University also permitted students to select credit/non-credit for courses.

In Fall 2020, 45 students (6%) opted to earn credit/non-credit for the first-year course. In Fall 2021, the first-year course returned to an in-person modality with a select number of online synchronous available for a student's individual comfort transitioning back to in-person instruction. The Fall 2020 first-year course cohort saw a 10% decline retained from F20 to F21 from the Fall 2019 first-year course cohort retained at 69% from F19 to F20. As a result of the ability to return to classroom delivery, first-year courses have shifted back to the primary delivery method of face-to-face, in-classroom facilitation.

In Fall 2021, 598 students were enrolled into the Akron Experience course. As of Fall 2022 (as of 5/26/22), 52% of the Fall 2021 cohort who took the Akron Experience course are enrolled in courses at The University of Akron.

| | Fall 2021 | Still Enrolled as of Spring 2022 | F21 to SP22 | Enrolled To Date (5.26.22) for Fall 2022 | F21 to F22 |
|---|---|---|---|---|---|
| Enrollment | 598 | 470 | 79% | 312 | 52% |
| *Grade Earned* | | | | | |
| A to C- | 413 | 376 | 91% | 296 | 72% |
| D+ to D- | 40 | 28 | 70% | 7 | 18% |
| F | 132 | 61 | 46% | 7 | 5% |
| WD | 25 | 5 | 20% | 2 | 8% |

In Fall 2020, 731 students were enrolled into the Akron Experience course, with 59% retained into Fall 2021.

| | Fall 2020 | Still Enrolled as of Spring 2021 | F20 to SP21 | Still Enrolled as of Fall 2021 | F20 to F21 |
|---|---|---|---|---|---|
| Enrollment | 731 | 551 | 75% | 430 | 59% |
| *Grade Earned* | | | | | |
| A to C- | 502 | 448 | 89% | 375 | 75% |
| D+ to D- | 24 | 15 | 63% | 10 | 42% |
| F | 130 | 41 | 32% | 17 | 13% |
| WD | 30 | 9 | 30% | 7 | 23% |
| CR (Credit) | 9 | 8 | 89% | 7 | 78% |
| NCR (Non Credit) | 36 | 30 | 83% | 14 | 39% |

8. **Learning Communities**

Students participating in learning communities engage in structured learning experiences that foster connections with their peers, establish relationships with their faculty members and academic advisors, and enable them to form positive connections to the campus community. Utilizing the information gathered from these experiences enables the University to identify those aspects of the learning communities that influence retention. The UA data indicates that the learning community structure shows much promise in increasing first-year retention rates, with current success at 75%.

Moving forward, faculty teaching in learning communities will work in collaboration to increase integration across the curricula and provide experiences that promote both the academic and social integration of first-year students. In addition, a more comprehensive assessment of the program will include qualitative data from participating faculty with assessment of first semester persistence, as well as, first-year retention, GPAs, and overall student satisfaction for all student participants.

| **Fall to Fall Retention for Learning Community Students** | | | |
|---|---|---|---|
| **Semester** | **Retained** | | **Total** |
| | **N** | **%** | **N** |
| **Fall 2021** | | | 560 |
| **Fall 2020** | 566 | 75.1% | 754 |
| **Fall 2019** | 608 | 72.74% | 810 |
| **Fall 2018** | 563 | 70.46% | 799 |

9. **Alternative Forms of Credit**

Decreasing the time to degree completion is a top priority, and several initiatives are currently in place. College Credit Plus, Advanced Placement, Career-Technical Credit Transfer, Early College High School, CLEP, DSST, credit by exam, International Baccalaureate, and military training and experience can be used to allow a student to complete a bachelor's degree in just three years. In 2018-2021, over 4000 students were awarded more than 53,000 semester credit hours.

**10. Decrease Number of Credit Hours to Degree Completion**

The University of Akron is working diligently to streamline graduation requirements so that most bachelor's degree programs can be completed in as few as 120 semester credit hours and associate degree programs can be completed within 60 semester credit hours, without compromising accreditation requirements.

| | Semester Credit Hours Required for Degree Completion | Number of Programs | Percentage of Programs |
|---|---|---|---|
| Bachelor's Degree Programs | 127-148 | 75 | 31.65% |
| | 121-126 | 17 | 7.17% |
| | 120 | 145 | 61.18% |
| Associate Degree Programs | 61-65 | 11 | 33.33% |
| | 60 | 22 | 66.67% |

11. **Mentoring Services**

*Peer Mentoring*

- The Office of Multicultural Development coordinates peer mentors for nearly 300 historically underrepresented first-year students each year. Peer Mentors are successful sophomores, juniors and seniors who have demonstrated the ability to relate well with first-year students from varied ethnic, social, and cultural backgrounds. They serve as role models who lead and support incoming first-year students by setting a positive academic example, encouraging mentees to make good decisions and to utilize campus resources that include tutoring, counseling, meeting with their academic advisors and faculty members, and getting involved with campus activities. During Fall 2021, the Office of Multicultural Development Peer Mentoring Services served 172 students, of which 67 were fully immersed in the mentoring and wrap around services provided by the office. This yielded a 64.18% retention rate of our fully immersed students. During Fall 2020, the Office of Multicultural Development Peer Mentoring Services served 170 students, of which 66 were fully immersed in the mentoring and wrap around services provided by the department. This yielded a 68.18% retention rate of served through this program.

*Military Services Center Veteran Peer Advising Program:*

- Military Services Center Veteran Peer Advising Program in collaboration with Student Veterans of America connects incoming Student Veterans with student veterans already on campus to help them navigate college life, identify challenges, and refer them to the appropriate resources on or off campus. Our Peer Advisors are members of The University of Akron military community who are not only knowledgeable about resources available, but the understanding of the challenges unique to veterans as they transition from military to campus life. Overall contacts (outreach and interactions) for 2020 were 256; 2021 overall contacts were 235.

**12. Learning Assistant Program**

The learning assistant program is designed to help students succeed in traditionally difficult courses that tend to be the "gateway" courses (mostly mathematics and science classes) to successfully completing the degree program. Compared with students who do not have learning assistants, students with learning assistants earn three to four more credits per semester, are less likely to drop courses, and have a greater chance of successful course completion.

Courses over the 2020-2022 retention and completion plan cycle involved with the Learning Assistant Program included Analytic Geometry Calculus II and III, Math for Everyday Life, Organic Chemistry I and II, Biochemistry, Anatomy and Physiology I and II, Abnormal Psychology, and Industrial/Organizational Psychology. During the 2020-2021 academic year, 836 students made use of the Learning Assistants Program totaling 5998 visits (11 Learning Assistants, 16 sections of courses). During the 2020-2021 academic year, 678 students made use of the Learning Assistants totaling 4019 visits (9 Learning Assistants, 11 sections of courses).

**13. Career Services for Students and Graduates**

Career Services provides career guidance and opportunities that lead to retention and persistence to graduation and fulfilling career goals upon graduation. Career development leading to retention and persistence to graduation is encouraged through:

- Career advising which includes major and career exploration.
- Use of the "Connecting UA Majors to In-Demand Jobs in Ohio Initiative" to help students explore majors and in-demand occupations which provide the most job opportunities upon graduation, and to help bridge the workforce gap in Ohio.
- Preparation for and connection to experiential learning opportunities necessary for career placement to include internships, co-operative education experiences, and on-campus student employment.
- The management of the On-Campus Student Employment program by Career Services allows early and frequent connection with students to encourage on-campus jobs and other experiential learning and career development. "When academic performance variables are set aside, on-campus student employment tops the list of positive predictors of retention - the odds of retention increase by 210% for students who worked on campus between 2016 and 2019." (source: Kennedy & Co. 2020)
- Development of career readiness skills.
- Career goal setting through identified "career checklists" from the first year to graduation.
- Participation in networking opportunities with employers which leads to experiential learning positions and job placement upon graduation.
- Graduate school planning.

The University of Akron surveys spring graduates of undergraduate programs to determine their career outcomes. For Spring 2021, 85% of graduates earning a bachelor's degree participated in at least one experiential learning experience

before graduating. UA's Spring 2021 Career Outcomes Rate was 95%. Career Outcomes Rate is the percentage of graduates who earned an undergraduate degree and are employed full time, part time, or continuing their education. The most recently reported nationwide overall placement rate is 82% for 2020 (source: National Association for Colleges and Employers "NACE"). The UA career outcomes data is based upon a survey knowledge rate of 72% of our spring 2021 graduates.

14**. Retention Analytics**

Retention Analytics In 2017, the University developed institutional dashboards to establish key performance indicators and oversight in five critical areas: Admissions and Recruitment, Enrollment, Retention and Graduation, State Share of Instruction (SSI), and Scholarship. These descriptive analytics were incorporated with existing operational reports to rescope enrollment initiatives and unify instructional discussions surrounding retention and persistence opportunities.

In 2022, the University partnered with Stellic to implement a unified student success platform to empower students to actively participate in developing their pathway to success and to allow advisors and academic leadership to quickly identify students in need of academic help, outreach, or intervention. Additionally, Stellic provides early warning indicators for students who might not persist to the next term. Potential risks can also be scaled to identify difficult courses and use student performance in critical courses for prediction of student career outcomes. Upon full deployment, Stellic will utilize previous test and class performance, a career summary, and baseline demographics to help advising staff better understand a student's journey throughout their career.

Current initiatives include expanding the capabilities of reporting through analytics, further application or Machine Learning and Artificial Intelligence, and a shift to Microsoft Power BI reporting platform for greater collaboration and distribution of institutional reports. This opens the way to root cause analysis, identifying vulnerable populations, and more rigorous academic assessment in the context of serving the needs of students

15. **Adult Persistence and Retention Efforts**

Many of the barriers adult students encounter at The University of Akron parallel those of traditional students. Most adult first-time college students are first-generation, middle to low-middle socioeconomic background, and have had some catalyst within the last year or two which has pointed them toward improving their skill levels through education. But, where the traditional students have an expectation of going to college, adult students must overcome the added stress of not having accomplished this at an earlier age. Many of these students had thoughts of college but life or family got in the way.

The UA Adult Focus office is in place to address these issues and to work with campus or community resources to support adult learners. Adult Focus works with potential, continuing, and returning adult students. For potential students it can mean explaining the college admission process, helping with applying to the University, including FAFSA assistance, providing informational programs, and assisting with the transition to being a college student. Often, continuing adult students require specialized guidance, such as navigating campus, technology tutorials, study skills, support services, and a comprehensive approach to academic advising. Adult Focus works with the degree-granting colleges to provide additional support to keep these students enrolled. This support encompasses:

- Comprehensive wrap-around academic support which begins with advocacy and academic advising.
- Scholarship opportunities for both full and part-time students.
- Educational programming to explain scholarships, how to find them, and how to apply.
- Access to referral to internal and community-based organizations to aid in retention.

- A free math skills program which is offered each semester for students or potential students who could test into remedial math. The goal is to improve their math scores sufficiently to place out of remedial classes to save both time and money toward degree.
- Commitment to building a sense of community and support through adult only student organizations and programming.

Adult Focus collaborates with College Now Greater Cleveland, and Project Learn of Summit County. College Now Greater Cleveland provides a satellite office within the Adult Focus office to provide ongoing support to students. Amid the pandemic, the needs of adult students changed as many were faced with increased demands to balance home, work, and their academics.

**Retention and Completion Metrics**

Metrics have been developed and separated into two broad categories: general retention and completion metrics that will be reported for various bachelor's degree-seeking student cohorts, and initiative specific metrics. The student cohort groups will include remedial, at-risk pre-majors (ACT 17 or below and high school GPA of 2.5 or below), college-ready pre-majors (ACT 21 and a 3.0 high school GPA), first generation, Pell eligible, African American, Hispanic, adults 25+ years, learning communities and international.

**WORKFORCE DEVELOPMENT PRIORITIES**

The University of Akron has well over 30 programs that align with the eleven JobsOhio key industries. An important ingredient to the success of the programs includes opportunities for students to engage in internships and co-op experiences. Most degree programs offer internship or co-op component. We will focus on increasing these opportunities for students, as our data indicates the positive impact on career placement. One example includes the full-time placement after *6-month graduation is above 97% of our engineering, engineering technology and computing students.* Below is a just a small sampling of degrees offered at The University of Akron that align with each industry.

**<u>Advanced Manufacturing</u>**

- Automated Manufacturing Engineering Technology
- Chemistry
- Chemical Engineering
- Computer Engineering
- Electrical Engineering
- Electrical and Electronic Engineering Technology
- Mechanical Engineering
- Mechanical Engineering Technology
- Polymer Science and Polymer Engineering

**Aerospace and Aviation**

- Aerospace Systems Engineering
- Biomedical Engineering
- Civil Engineering
- Computer Engineering
- Computer Science
- Electrical Engineering
- Mechanical Engineering

**Automotive**

- Automated Manufacturing Engineering Technology
- Biomedical Engineering
- Computer Engineering
- Electrical Engineering
- Electrical and Electronic Engineering Technology
- Mechanical Engineering
- Mechanical Engineering Technology

**Autonomous Mobility**

- Computer Engineering
- Computer Information Systems
- Computer Science
- Civil Engineering
- Electrical Engineering
- Electrical and Electronic Engineering Technology
- Mechanical Engineering
- Mechanical Engineering Technology

**Energy and Chemicals**

- Chemical Engineering
- Civil Engineering
- Construction Engineering Technology
- Corrosion Engineering
- Corrosion Engineering Technology
  Geology
- Electrical Engineering
- Electrical and Electronic Engineering Technology
- Mechanical Engineering
- Mechanical Engineering Technology

- Polymer Science and Polymer Engineering
- Survey and Mapping

**Food and Agribusiness**

- Biomedical Engineering
- Chemical Engineering
- Corrosion Engineering

**Financial Services**

- Computer Information Systems
- Computer Science
- Financial Planning
- Financial Management
- Risk Management and Insurance
- Accounting
- Business Data Analytics
- Economics

**HealthCare**

- Allied Healthcare Administration
- Audiology
- Biology
- Biomedical Engineering
- Chemical Engineering
- Computer Information Systems
- Computer Science
- Exercise Science
- Nursing
- Respiratory Therapy
- Social Work
- Speech Language Pathology

**Logistics and Distribution**

- Computer Information Systems
- Computer Science
- Supply Chain and Operations Management

**Military and Federal**

- Aerospace Systems Engineering
- Civil Engineering

- Construction Engineering Technology
- Computer Engineering
- Computer Information Systems
- Computer Science
- Corrosion Engineering
- Corrosion Engineering Technology
- Electrical Engineering
- Mechanical Engineering
- Mechanical Engineering Technology

**Technology**

- Automated Manufacturing Engineering Technology
- Computer Information Systems
- Construction Engineering Technology
- Corrosion Engineering Technology
- Electrical and Electronic Engineering Technology
- Information Systems
- Mechanical Engineering Technology
- Surveying and Mapping

**Program Descriptions:**

**Accounting**

The School of Accountancy's undergraduate accounting degree prepares students to pursue such certifications as certified public accountant (after completing the state-mandated 150 semester hours of college credits), certified management accountant, certified internal auditor, and certified information systems auditor. We offer an Accelerated B.S./M.S. in Accounting and an Accelerated B.S./M. in Taxation degree as a seamless path toward obtaining the 150 semester credit hours needed to sit for the certified public accountant examination.

**Aerospace Systems Engineering**

The Aerospace Systems Engineering Program teaches students how to design and build vehicles that fly, like rockets, satellites, and planes. At UA, students in Aerospace Systems Engineering learn engineering fundamentals, such as heat transfer, fluid mechanics, and thermodynamics, along with aerospace specific courses including avionics, aerospace propulsion, and fundamentals of flight. To finish this degree program, students must complete several required co-ops with corporations or governmental entities.

**Allied Health Care Administration**

The Bachelor of Allied Health Care Administration (BAHA) degree is one of the fastest growing fields in healthcare. This online degree allows students both new and those holding an Associate of Applied Science degree to earn a bachelor's degree, often a requirement to move into a supervisory or management role. Allied Health Care Administration managers work closely with clinical and administrative staff as they process, analyze, and report information vital to the delivery of health care.

**Audiology**
Audiologists assess auditory disorders including hearing loss through hearing conservation programs and hearing protection devices. Students can earn an undergraduate pre-professional degree in speech-language pathology and audiology to prepare them for audiology doctoral school, which is required to practice.

**Biology**
Biology is the fastest-growing field of science today. Its impact is carried to many fronts such as medicine and health care, the environment and climate changes, global population, and food sources. Core courses provide the fundamentals of modern biology (e.g., principles of biology, evolution, ecology, cell and molecular biology, genetics). A student can earn a Bachelor of Science degree with a major in biology or biomedical sciences, and graduates are prepared for a variety of careers or for admission into medical, dental, veterinary, or pharmacy school.

**Biomedical Engineering**
The Biomedical Engineering Program at UA applies biology and engineering principles to medicine and healthcare. Our students graduate with the skills needed to improve community health and change lives. The curriculum focuses on the design of medical devices and hands-on laboratory experiences to reinforce technical concepts from the classroom. Paid undergraduate research opportunities are available in the areas of tissue engineering, biomaterials, and biomechanics.

**Business Data Analytics**
A degree in Business Data Analytics is designed to meet the growing demand for professionals who can gather, sort, and interpret substantial amounts of data to help businesses solve problems and operate more effectively. This STEM-designated program combines coursework in business, economics, and data analytics to provide students with the knowledge, skills and hands-on experience needed to develop data-driven solutions in finance, insurance, and other industries.

**Civil Engineering**
The Civil Engineering Program at UA provides students with the education needed to plan and design large-scale projects like bridges and power plants; study and solve societal and environmental challenges like providing safe drinking water; and design and maintain transportation systems. To achieve the high-level of professional competence needed, students participate in an extensive study of mathematics, solid and fluid mechanics, engineering materials, structural design, and environmental reactions.

**Construction Engineering Technology**
The Construction Engineering Technology Program at UA includes classroom, laboratory, and industry experiences to prepare students for management and leadership related careers in construction. Students learn the latest in construction technology including building information modeling, contract law, project planning and scheduling, cost and quantity estimating, lean building science, and green and sustainable building practices. They learn from experienced faculty who are professional engineers and expert practitioners in their areas of expertise.

**Chemical Engineering**
The Chemical Engineering Program at UA stresses the integration of mathematics, science, and chemical engineering fundamentals. Students learn how to design molecules, materials, and devices to solve environmental sustainability, chemical process systems, engineering biology, and nanotechnology problems. Students gain experience in a wide range of emerging technologies through laboratory courses and design or research electives. Exciting work is performed in advanced functional materials, environmental engineering, energy sustainability, interfacial phenomena and engineering, catalytic materials and engineering, cellular and biochemical engineering, nanomaterials, data science, molecular simulations, and biosensing.

**Chemistry**
The department of Chemistry offers 4 undergraduate degrees as well as a minor in chemistry. The Bachelor of Science degrees in Chemistry and Chemistry with Polymer option offer greater concentration in chemistry and are accredited by the American Chemical Society. The B.S (Bachelor of Science) in Biochemistry bridges the chemistry and biology disciplines and adheres to the standards established by the American Society of Biochemistry and Molecular Biology. The B.A. (Bachelor of Arts) degree allows students sufficient time to minor in another subject. Useful minors include biology, business, or a foreign language.

**Computer Engineering**
Students in UA's Computer Engineering Program gain the foundation in programming, operating systems, and computer systems, while also studying circuits, electronics, and analog and digital hardware. This gives our computer engineering students a unique perspective of how software and hardware work together in computing systems. Branches of computer engineering include operating systems, embedded systems design, digital circuits, algorithms, software design, and computer architecture, among others. Important applications include wired and wireless networks, simulation, automation, digital control, sensing, robotics, apps, data management, and many others.

**Computer Information Systems**
The Computer Information Systems (CIS) Program at UA offers high-level education and training for future IT professionals. Taught in cutting-edge computer labs, the CIS curriculum gives students the opportunity for specialization. The networking option provides students with the skills to help organizations design, maintain and secure internal and external networks. The programming option prepares students to attain the knowledge and applied skills necessary to utilize current technology and tools to meet a range of technological needs in business, government, healthcare, education, and other industries. The cybersecurity option — the first of its kind among public universities in Ohio — blends instruction in computer architecture, programming, networking, cryptography, and other key areas to prepare students to apply security principles and practices to evaluate and mitigate risks and threats.

**Computer Science**
Students in Computer Science at UA may enroll in a systems or management track. Each track will develop core competencies in object-oriented programming, data structures and algorithms, computer systems software design and engineering, and operating systems. The systems track is a traditional computer science major exploring both problem-solving through the creation of software and effective use of modern computer systems. The management track has an emphasis on business and is targeted at preparing students to use computers as the key component to solve problems in a business environment.

**Corrosion Engineering**
UA offers the only corrosion engineering bachelor's degree program in the country. Students will be prepared to enter the engineering workforce and make an impact in refining, transportation systems, water distribution, energy, food, and chemical processing industries. They will develop practical applications of chemistry, mathematics, and physics to develop economic ways of controlling the degradation of materials. Our National Center for Education and Research on Corrosion and Materials Performance provides numerous distinctive opportunities including industry-funded scholarships, research opportunities, industry certification and travel to national conferences.

**Economics**
Economics is the study of how individuals, households, businesses, governments, and societies allocate their scarce resources. Students learn rigorous statistical analysis to investigate these changes which enables them to make statistically based arguments about public and private issues. A Bachelor of Arts in Economics earned at The University of Akron prepares students for the skills needed to enter the labor force or to advance to graduate/professional school.

**Electrical Engineering**
UA's comprehensive curriculum in Electrical Engineering prepares students to identify, formulate, and implement solutions to real-world problems. Students learn how to use modern engineering tools in well-equipped laboratories, with activities that reinforce the concepts learned in the classroom. Electrical engineering fundamentals, such as courses in circuits, statics, and mechanics of solids are followed by more advanced courses in electromagnetics and electronic design to provide a deep knowledge of electrical systems.

**Electrical and Electronic Engineering Technology**
The Electrical and Electronic Engineering Technology Program at UA embraces laboratory-based learning methods that prepare students for careers that utilize the newest technologies. Students learn from faculty who are seasoned professionals and expert practitioners in their areas of expertise. Students take courses on microcontrollers, circuits, industrial machine control, technical report writing, and more.

**Exercise Science**
Exercise Science is the multidisciplinary study of human movement. Careers in this field range from improving human performance to preventing or treating hypokinetic diseases such as cardiovascular disease, obesity, some cancers, and diabetes. The Exercise Science undergraduate program prepares learners to become integral members of the health and wellness team as Personal Fitness Trainers, Strength and Conditioning Coaches, Health and Wellness Coordinators and Clinical Exercise Physiologist in the health and fitness industry and allied healthcare settings. The academic program also serves as a prerequisite bachelor's degree for admission into several professional graduate school programs including physical therapy, occupational therapy, physician assistant, medical school, Doctor of Chiropractic, athletic training, podiatry, and others

**Financial Management**
Today's business environment increasingly requires efficient management of firm assets. The Financial Management major trains students in the art and science of efficiently managing money.

**Financial Planning**
Financial planners help clients manage their money. In addition, planners often advise clients on personal goals such as buying a home or retiring. Students can enhance their professional credentials by completing educational requirements toward the Certified Financial Planner (CFP) designation.

**Geology**
Geology is the study of Earth's materials, structures, and processes and how they have changed through time. This knowledge may be applied to exploration for natural resources, including metals, petroleum, and water; understanding natural hazards such as earthquakes, volcanoes, and landslides; addressing problems associated with environmental contamination; and investigating Earth's history to understand the evolution of life and global climate change. Geologists are employed by natural resource companies, environmental consulting firms, government agencies, nonprofit organizations, and universities.

**Information Systems**
The Information Systems (IS) field deals with planning, directing, and coordinating the development, realization and maintenance of Information and technology-related functions of an organization. Information systems are pervasive to all organizations. Information Systems is in a rising trend with surging market demand for business-minded data scientists, predictive analysts, computer specialists, including systems analysts, systems developers/integrators, data architects/analysts, database administrators, project managers, network engineers, and technical support specialists. Working with upper management, the graduates of this program define the technical goals of the company and plan how to align these with the strategic goals. As the AI/Machine Learning/Analytics revolution continues to unfold,

information systems specialists who have a strong combination of business and technical skills are enjoying significant demand in the global job market.

**Manufacturing Engineering Technology**
Automated manufacturing engineering technology is used to lower operating costs, improve worker safety, and increase production output at improved quality levels. In the Automated Manufacturing Engineering Technology program at UA, students learn all aspects of manufacturing including the analysis, design, and management of all the resources, facilities, and people involved in manufacturing processes. Industry-trained faculty teach computer-aided technologies, including CAD (Computer Aided Design), CNC, and CAM.

**Mechanical Engineering**
Mechanical engineers play important roles in the automotive, petroleum, energy generation and conversion, aerospace, tire, consulting, chemical, electronic, and manufacturing industries. Students in UA's Mechanical Engineering Program learn the basic principles of thermal/fluids, structures and motion, and control systems to develop solutions for real-world challenges, processes, and products. They develop the ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

**Mechanical Engineering Technology**
Mechanical engineering technology students at UA learn engineering fundamentals involving product testing, the design of products, and the machines required to manufacture them. The curriculum provides students with an ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.

**Nursing**
Nursing is concerned with the health of individuals, families, and the community. It combines science and social service skills in providing care to the sick and in the promotion of wellness. Nursing offers opportunities for many types of employment. Nursing education at the baccalaureate level synthesizes knowledge from nursing, humanities, social, cultural, physical, and natural sciences. It includes clinical practice in hospitals, other health care agencies and the community. Graduates are prepared to function as nurse generalists in a variety of health care jobs.

**Polymer Science and Polymer Engineering**
UA's Polymer Science and Polymer Engineering Program offers students the opportunity to capitalize on our world-class teaching and research environment to launch their careers in the vibrant, thriving polymer industry centralized in Northeast Ohio and beyond. The program builds a solid foundation in polymer chemistry, polymer physics, and polymer engineering with opportunities to specialize in sustainability, processing, or biomaterials. Students benefit from state-of-the-art processing facilities, access to the 25 polymer-related research labs, industrial collaborations with local polymer-focused companies, and a wealth of research opportunities.

**Respiratory Therapy**
The Bachelor of Science in Respiratory Therapy degree is designed to prepare entry-level practitioners to function as clinical leaders in the specialized field of respiratory therapy. The US-BLS projects that respiratory therapy is a growing profession with employment that will increase much faster than average. This program trains students to manage the airway and lungs through classroom, laboratory, and clinical experiences. Respiratory Therapists regularly consult with physicians to develop treatment plans for patients and perform an assortment of diagnostic tests such as those that measure lung capacity. Therapists also provide treatment using a variety of methods including chest physiotherapy, aerosolized medication delivery, airway intubation, and mechanical ventilator management. In addition, RTs are experts at monitoring the progress of treatment and teaching patients how to best manage their disease at home. This degree allows the graduate to accelerate advancement into leadership and managerial roles and provides a foundation for graduate level coursework.

**Risk Management and Insurance**
A degree in Risk Management and Insurance (RMI) trains students to identify, analyze, and manage financial and operational risks that are inherent in both personal and business settings. Students can enhance their professional credentials by completing educational requirements toward the following certifications:

- Property/Casualty and Life/Health Insurance Licenses-Approved pre-licensing education for insurance licensing. Students can earn certificates to sit for the State of Ohio insurance exams when meeting attendance requirements in designated courses.
- University Associate Certified Insurance Counselor (UACIC) – Students can earn the UACIC certification by successfully completing the coursework and exam required by the National Alliance for Insurance Education.

**Social Work**
According to the US Bureau of Labor Statistics, employment for social workers in the field of health care is projected to grow 14 percent over the next 10 years as the need to provide services to the aging population increases. In addition, employment of mental health and substance abuse social workers is projected to grow 17 percent as more people seek treatment for mental illness and substance abuse (https://www.bls.gov/ooh/community-and-social-service/social-workers.htm#tab-6). Ohio offers social work licensure at both the undergraduate and graduate levels, and many students work as licensed social workers while they pursue their clinical education and training.
By offering classes, learning labs, and hands-on community-based internships, students are well-prepared to practice in health care settings.

**Speech-Language Pathology**
Speech-language pathologists work in various health-care settings as part of a team that evaluates and manages patients with speech and language problems and patients with swallowing disorders. Students can earn an undergraduate pre-professional degree in speech-language pathology and audiology to prepare them to pursue a master's degree, which is required to practice.

**Supply Chain and Operations Management**
Supply Chain & Operations Management (SCOM) focuses on areas such as transportation and logistics, inventory and forecasting, sourcing and supplier management, and global supply chains. SCOM prepares our students to pursue exciting careers as supply chain professionals. Overall, SCOM managers contribute to enhancing the bottom line of any business (service or manufacturing) by reducing costs, increasing efficiency while ensuring effectiveness of business functions and processes.

**Surveying and Mapping**
UA's surveying programs include classroom, laboratory, and industry experiences to prepare students for technical and professional careers in surveying. Students learn to manage geospatial data while using advanced technology including laser scanning, drones, precise satellite positioning, ground penetrating radar, and robotics. They learn from experienced faculty who are professional surveyors and expert practitioners on how to apply knowledge in mathematics, law, and map design and develop land "detective" skills to solve challenging boundary evidence problems.