COLUMBUS STATE
COMMUNITY COLLEGE

IT Work Study Flexible Apprenticeship Model (ITFA)

NSF ATE Grant Project

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Earn-and-Learn: Work-Based Learning Program Replication Guide for Information Technology

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Introduction

Columbus State Community College has been building successful flexible apprenticeship programs for over a decade. Driven by our values, desire to innovate, and position as the region's front door to higher education the Information Systems Technology Department launched the IT Flexible Apprenticeship (ITFA) program in 2017.

Traditionally, the IT sector has not embraced registered apprenticeships due to strict Department of Labor (DOL) guidelines and documentation requirements. In creating an unregistered apprenticeship program Columbus State offered

IT industry partners a more flexible option—one that better fits the fast-evolving industry. This flexible model also allows Columbus State to meet the needs of our institution, local workforce, and students.

The ITFA program model is based on Columbus State's successful Modern Manufacturing Work Study (MMWS) Program, and offers students a direct, accessible, and affordable pathway to the IT industry. ITFA students take part in comprehensive coursework, career readiness training, and a centralized hiring process that leads to on-the-job training and mentorship.

GRANT SUPPORT FOR ITFA PROGRAM & APPRENTICESHIP GUIDANCE

The ITFA program is supported by two grants: The National Science Foundation Advanced Technological Education (NSF ATE) IT Work Study Flexible Apprenticeship Model (grant no. 02211) as well as the US Department of Labor (DOL) H1-B Scaling Apprenticeships Through Sector-Based Strategies "Flexible Learning Expressway for Technology (FLEXTech) Apprenticeship Consortium" (grant no. HG-33028-19-60-A-39).

Resources to support the creation, launch, and first cohorts of the ITFA program have come from the National Science Foundation's ATE program. Columbus State sought guidance from other institutions with similar goals through ATE Central—the National Science Foundation's hub for grantees working in advanced technological education. As you build your own flexible apprenticeship model, we strongly encourage you to check out these resources.

The US Department of Labor provides guidance on the required components of a flexible apprenticeship. All apprenticeship programs should use the Five Hallmarks of High-Quality Apprenticeships:

1. Paid, work-based learning experience
2. On-the-job training and mentorship
3. Related technical instruction
4. Industry-recognized credentials earned
5. Safety, Supervision and Equal Opportunity practices

The DOL also supports grantees through Workforce GPS.

LINK TO ATE CENTRAL

LINK TO WORKFORCE GPS

Why the IT Industry Wants Earn-and-Learn Models and Why Now?

1. **RECRUITING AND RETAINING QUALITY CANDIDATES**
   As unemployment rates decrease and competitive wages increase, many employers are struggling to hire and retain quality workers. Earn-and-learn models can be an effective way to assist employers with finding quality candidates, equipped with the skills they want, and retain them in the long term.

2. **RETIRING WORKFORCE**
   With an entire generation ready to retire by 2031, many positions will be left unfilled. Employers are exploring earn-and-learn strategies to upskill existing employees.

3. **AUTOMATION & ADVANCEMENTS IN TECHNOLOGY**
   With the rise of automation, artificial intelligence, and changing job models, millions of workers will need additional training or credentials. At the same time, entirely new categories of jobs are emerging. Many employers are looking for training and hiring models that incorporate on-the-job training so workers can better adapt to the changing nature of work as technology evolves.

4. **DIVERSITY, EQUITY, AND INCLUSION**
   Employers must take a critical look at diversity, equity, and inclusion practices as the U.S. workforce and customer base becomes more diverse. Earn-and-learn models often reach populations overlooked by traditional workforce recruitment and educational models.

5. **THE RIGHT SKILLS IN THE RIGHT TIME FRAME**
   Two-year degrees and stackable certificates are becoming just as, if not more, desirable than four-year degrees for IT workers. Learning on the job and in the classroom concurrently increases the number of candidates who are ready to complete job-specific skills in a shorter time frame and decreases the resources an employer uses to train recent graduates.

Diversity, Equity and Inclusion in IT

Historically, 4-year pathways have been seen as the only pathway to IT—creating barriers to tech education as well as a homogeneous industry. Two-year earn-and-learn programs like ITFA are the ideal solution for making careers in IT more accessible by offering flexible course schedules, on the job training, access to industry mentors and networking opportunities, and a chance to earn a salary while earning credentials.
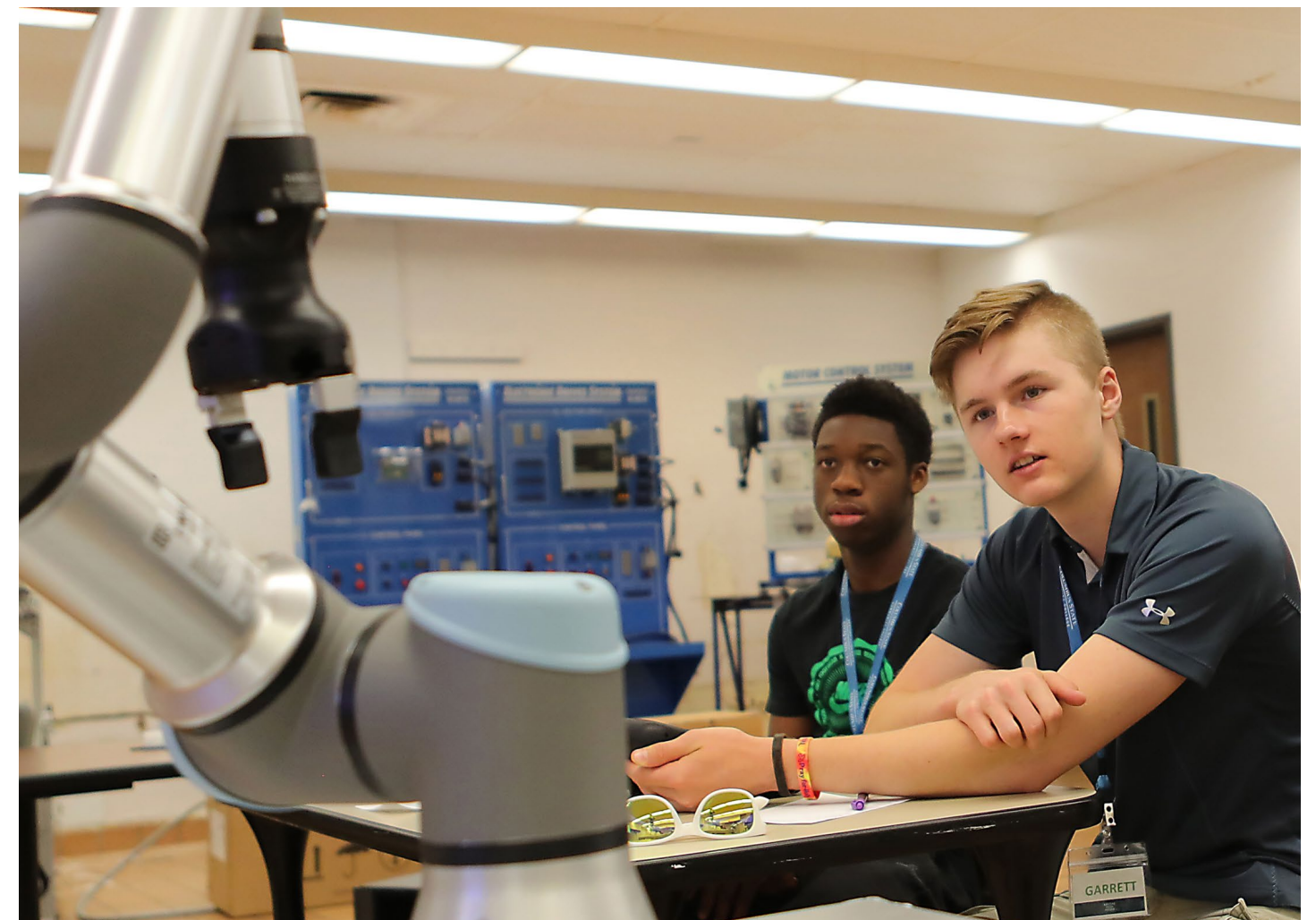
Since ITFA's pilot cohort in 2017:

- 30% of ITFA students identify as female, compared to 27% across all tech companies in the US (*Resetting Tech Culture* | **Accenture Report**)
- **55% of students have identified as belonging to racial or ethnic groups traditionally underrepresented in the IT industry**

2021 Cohort (hired in 2022):

- 38% of ITFA students hired into an apprenticeship identified as female
- 47% of ITFA students hired into an apprenticeship from traditionally underrepresented race/ethnicity demographics

Removing barriers to education and diversifying the tech workforce leads to a nimble tech industry. Tech companies with teams comprised of members who offer a broad range of perspectives and experiences outperform their more homogeneous counterparts by 35% (**Draup Talent Survey**).

Employees of companies with a diverse workforce report higher job satisfaction as well as lower levels of burnout (**Accenture Report**).

Columbus State Community College's Flexible Apprenticeship Model

The ITFA Model approaches work-based learning differently than traditional co-op models (alternating semesters of full-time work and full-time coursework), internships (paid or unpaid work experience that may or may not coincide with technical instruction), and exploratory work experience programs (technical instruction paired with job shadowing opportunities) by scheduling coursework and paid work experiences concurrently. Participation in the flexible apprenticeship program allows students to engage with employer partners in a way that bridges perceived experience gaps.

Technical courses are "front-loaded" in the ITFA program—meaning that students are learning employment-critical skills during their first two semesters. This enables them to apply what they learn in the classroom to a real-world work environment and be contributing members of the teams they join from day one of their apprenticeships.

How Students Move Through the ITFA Program

Pre-Program/Fall Semester Year 1

1. Prospective students apply to Columbus State and go through the standard acceptance and onboarding process OR change their plan of study to one of the ITFA eligible programs if they are already a Columbus State student.

2. Qualified students apply to the ITFA program, typically by the end of September. To be considered qualified students must:
   a. Be "college ready".
   b. Be in AND maintain good academic standing—2.0 GPA or higher.
   c. Be eligible to work in the United States without sponsorship.
   d. Be in one of the qualifying applied technical programs for Information Technology. Currently Columbus State offers the ITFA program for our Software Developer, Cybersecurity, Web Developer, IT Support Technician and Management Information Systems associate degrees as well as our Data Analytics and Data Center Technician Certificates.

3. Accepted students complete career readiness and hiring activities throughout the program's first year. During this time, they are also taking technical coursework and are typically advised to take a full-time course load.

Spring Semester Year 1

1. Employer partners and ITFA students participate in a centralized hiring process where they network, conduct interviews, and select the right people for the right jobs.

2. Formal job offers are made.

Summer Semester

1. Students take ITFA coursework.
2. Hired apprentices begin working in July or August.
   a. Apprentices not selected through the centralized hiring process continue to work toward industry-recognized credentials and an associate degree.

Fall and Spring Semester Year 2

1. Apprentices work 20-40 hours a week while continuing coursework with a schedule adapted to fit their work schedule.

2. Apprentices graduate at the end of spring semester, Year 2.
   a. Since the pilot year of the ITFA program 80% of Columbus State's ITFA apprentices have received offers for full-time employment from the company where they completed their apprenticeship. Apprentices who are not offered full-time positions, or those exploring their options, continue investigating opportunities.

Experiential Learning Earn-and-Learn Model
A Birds Eye View of Columbus State's "Earn-and-Learn" Program Model

CAREER READY

ITFA employer partners consistently list interpersonal, or "soft," skills as one of the most important competencies necessary for success in the IT industry. To better prepare our students, the Career **READY** (Reach, Elevate, And Develop Yourself) model was developed by Columbus State student support staff. Rather than students thinking about career readiness training as they start to look for jobs, or even after graduation, Career READY takes a more proactive approach that embeds career readiness training within the program. The Career READY process focuses on preparing ITFA students for the interview and centralized hiring process for apprenticeship, but closely mirrors the interview and hiring process of the IT industry. This helps ITFA students and apprentices know what to expect when they enter the job market after graduation.

As part of the Career READY program, students attend a mixture of group workshops and individual sessions with Career Services to develop professional materials and practice strategies for success in the networking and interview events. Workshops include resume writing and review; interview skills; employer research; diversity, equity, and inclusion training; mock interviews; one-on-one coaching; crafting elevator pitches; and professionalism. Only students who have completed all mandatory requirements and received Career READY designation can move forward with networking and interviewing with prospective host employers.

Columbus State acknowledges that an apprenticeship program like the ITFA program isn't a good fit for every student. It is difficult to balance a full-time course load, an apprenticeship, and responsibilities at home. Practicing holistic advising techniques that meet students where they are will help your institution retain students and determine which candidates would and wouldn't be appropriate for the program. ITFA advisors at Columbus State meet with candidates one-on-one at the beginning of the program to discuss priorities, brainstorm strategies for managing their responsibilities, and map out any potential roadblocks to success.

The Career Competencies sheet can be found here: **Career READY Competencies Sheet** and the NACE standards can be found here: What is Career Readiness?
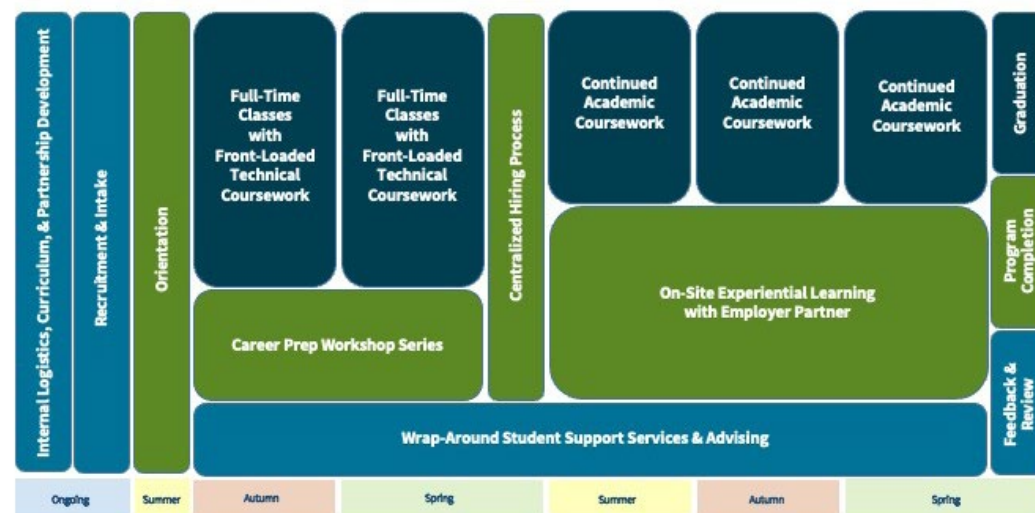
CENTRALIZED HIRING PROCESS

The partnership between Columbus State's Office of Partnerships and Programs (P&P) and Career Services serves as the backbone for our ITFA centralized hiring process. P&P manages relationships with employer partners; tracks and manages student progress toward Career READY status; plans and organizes networking and interview events; as well as any other duties required to keep the program running smoothly.

The ITFA Centralized Hiring Process:

Step 1: Career Prep
Students spend the first few months in the program getting Career READY — preparing a resume, participating in a mock interview, and recording an elevator pitch. While working on those projects students must attend workshops and meet with Career Services team members.

Step 2: Resume Books & Elevator Pitch Videos
Once most apprentices have reached Career READY status, a document of all student resumes, organized by academic major, is sent to employers.

Step 3: Speed Networking
Employers receive the resume book 2 weeks prior to attending a virtual networking event where small groups of students rotate for a timed conversation and introduction with each employer. Following this event, employers are sent recorded elevator pitch videos and faculty feedback forms for each student via Microsoft Sway.

Step 4: Interviews
Within a week of the networking event, employers submit an interest list using a rating scale from *1 (Definitely Want to Interview) to 3 (Do Not Wish to Interview)* to indicate who they would like to interview. Once the interest lists of all employers are evaluated, interview schedules are created, and Columbus State facilitates a week-long interview process.

Step 5: Selection Process
Following interviews, employers make job offers and students accept or decline. Program staff continue to work with, and offer support to, students who are not extended an apprenticeship placement offer.

Creating Your Own Flexible Apprenticeship Model

Start Here: Define Your Goal

Consider the purpose of an earn-and-learn program for your institution.
- Are you hoping to make a program with specific employers in mind?
- Meet admissions goals?
- Increase completion rates by a specified amount?
- Place a specific number of candidates into sustainable entry-level positions?
- Consider institutional values. What is most important to your institution?

Defining your goal early in the process will help you develop an earn-and-learn program in IT with a cohesive vision and actionable mission.

Best Practices:
1. Set up a digital space for information related to the creation and launch of your program. Columbus State uses a combination of Microsoft products to manage the ITFA program and project management. Use tools your institution already has in place.

2. Create folders and/or work groups based on stakeholder groups, stage of project development, department, etc. Keep groups consistent throughout the project.

3. Consider data management at all stages. Will data live in the project's digital space? Who will update that data? Does your institution's CRM or data management software work well with your digital space or will project team members need cross-training?

Identify Stakeholder Groups

Successful earn-and-learn models require institutional support and sponsorship. Identifying key stakeholder groups and how they might help you reach your goal is an essential next step. Once you've identified the groups you'll want to work with, create a steering committee to help guide and support this work to help with leadership coordination, buy-in, and overall model design. Ideally, the committee should be composed of a combination of academic affairs, student affairs, and employer representatives. Over time, the role of the committee will diminish as the design and implementation phases end, so it's a good idea to consider how the roles of these stakeholders will change over the life of your program.

- **Academic Affairs**
  - ° Engage stakeholders to drive program success
  - ° Build relationships between the program and experts
  - ° Provide training to faculty support staff and employer partners
  - ° Identify the skills apprentices need to enter the workforce and strategize ways to incorporate those skills into the curriculum or career readiness programming

- **Advising & Student Support**
  - ° Establish best practices for building relationships with students and connecting them with campus resources outside of the earn-and-learn program
  - ° Plan communications for interacting with enrolled students on a regular basis to monitor program progression
  - ° Create institutional definition of holistic advising to ensure that students' needs are addressed

  - ° Use holistic advising to draft operating procedures for program advisors
  - ° Assist in gathering and tracking participant data

- **Data Management**
  - ° Construct sustainable strategies for data collection, tracking, and reporting
  - ° Use data to collaborate with other stakeholders to define successful elements of the program and identify areas for improvement

- **Employer Engagement or Workforce Development**
  - ° Work with employers to identify industry and local talent needs
  - ° Engage employer partners for apprenticeships
  - ° Involve faculty members in discussions with employers when appropriate
  - ° Act as a liaison between program and employer partners
  - ° Ensure workforce target goals are met

- **Employer Partners**
  - ° Identify knowledge, skills and abilities (KSAs) needed by local industry
  - ° Participate in curriculum development to align with industry needs
  - ° Detail requirements, processes, and company regulations regarding hiring apprentices

- **Experiential Learning**
  - ° Identify and implement operational procedures for apprenticeship program
  - ° Assist in identifying students who are ready to participate in apprenticeship
  - ° Lead project planning meetings and oversee workflow

- **Faculty**
  - ° Create program curriculum or adapt current curriculum, establishing benchmarks for KSAs that reflect the needs of industry partners
  - ° Lead day-to-day program management
  - ° Define program goals and set benchmarks for success
  - ° Align curriculum with state requirements for graduation as well as industry-recognized credentialing
  - ° Act as ambassadors for the program at an institutional level

- **Outreach/Marketing**
  - ° Establish recruiting and marketing strategies to reach prospective students
  - ° Plan events for program launch and ongoing engagement
  - ° Evaluate local market and create strategic plan for print materials, online presence, and social media engagement

Building Project Momentum

Once you've identified your stakeholders and defined their functions in the project, you can move forward with initial meetings and research.

1. Meet with key stakeholders and leaders in your institution's administration and faculty to get internal buy-in. This is where you'll propose an earn-and-learn program and get permission to move forward.
2. Map student recruitment, onboarding, enrollment, and retention processes at your institution— it's important to note software and systems used at this stage.
3. Identify gaps, overlaps, and needs connected to your goals and current processes.
4. Conduct a needs assessment of your regional workforce—identify ways in which your current program is meeting those needs or can improve.
5. Conduct prospective employer partner search.
6. Determine if other groups on campus are working with those employers and in what capacity.
7. Meet with steering committee to draft a vision statement and initial project plan.
8. Name an individual to lead ongoing project management and implementation—the ideal candidate should have the capacity to support a new program, strong administrative skills and experience engaging diverse stakeholders.

Curriculum Development

Focusing on front-loading technical coursework and making it possible for an apprentice to complete coursework while working 20-40 hours a week is the best place to start when standing up an earn-and-learn program.

For Columbus State, that meant a shift in advising and the order in which students take courses. Advisors for the ITFA program recommend that students planning on applying for the program schedule specific technical courses during their first year. This adapted plan of study prepares students with the skills they need to be contributing members of a team at their apprenticeship.

Columbus State uses the Business and Industry Leadership Team (BILT) model developed by Ann Beheler and the ATE-supported **Pathways to Innovation** team to involve industry leaders in the shaping of our curriculum. Rather than simply approving the existing curriculum, a BILT team guides and informs curriculum creation by benchmarking the knowledge, skills and abilities (KSAs) employees must possess to succeed in the industry. Course content is then evaluated with the benchmarked KSAs in mind.

Employer Engagement

You've identified local workforce needs, connected with potential employer partners, and brought in industry leaders in to inform your curriculum. Create a strategy for continued collaborative efforts and demonstrate your institution's commitment to sustaining a strategic talent pipeline by setting up your apprenticeships.
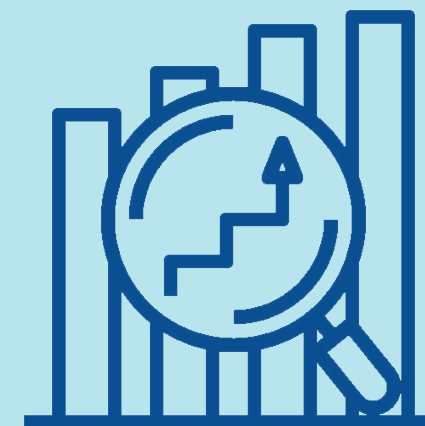
Communicating well-defined expectations to your employer partners ensures that apprentices will have meaningful on the job training and mentorship—building a meaningful relationship between institution and employer.

Since Columbus State's ITFA program was initially funded in part by a DOL Scaling Apprenticeship Through Sector-Based Strategies grant, we follow the DOL's guidelines for quality apprenticeship programs. All employer partners working with our ITFA apprentices must acknowledge that the work-based learning experience at their workplace followed these DOL guidelines.

1. **Paid, work-based component**
2. **OJT Training and Mentorship**
3. **Education and Instructional Component (sometimes referred to as Related Technical instruction or RTI)**
4. **Industry-recognized, nationally portable credential(s)**
5. **Equal Opportunity Employment which includes safety & supervision**

Defining Benchmarks, Requirements, and Expectations

What are the requirements your apprentices must meet? Where would an apprentice need support? Where could an employer benefit from creating a mentorship program? What professional development training should your institution offer for apprentices and employer partners? Answering questions like these, and brainstorming your own, will guide you in creating a strong communication strategy to engage employers.

Graphic by Witdhawaty

Maintaining the employer-partner relationship

At Columbus State, we utilize the Partnerships and Programs (P&P) department to communicate with employers and cultivate relationships. P&P also manages the central hiring process, coordinates with student success and career services personnel, and tracks apprentices throughout their work-based learning experiences. If your institution has the resources to put those tasks on one team or in one office, we strongly encourage taking advantage of that. If not, we recommend nominating a point person and directing all employer engagement through that person. Having a central email address for employer engagement is also helpful.

Onboarding and Orientation

Since your institution has processes in place for onboarding and orientation, we recommend evaluating and adapting these processes to fit the needs of your earn-and-learn program.

Columbus State's ITFA onboarding process:

1. Apply to Columbus State using the established admissions process, declaring one of the ITFA majors on the application.
2. Follow established guidelines for placement testing, if required.
3. Attend the general new student orientation.
4. Attend the ITFA program-specific info-session in which the requirements, expectations, and other details of the program are explained.
5. Apply to ITFA program.
6. Attend one of several onboarding workshops with one of the ITFA advisors at which time they map out their courses with the advisor
7. Attend ITFA Program Orientation.

As you adapt the onboarding and orientation process for an earn-and-learn program think about the data you will need to capture. If you are using a grant to fund your initial cohorts, consider the deliverables and reporting requirements. If you are collecting data for institutional research, think about how you want to measure your program's success. This is a great stage to involve your institutional research or effectiveness team. You also must consider participant consent. If protected personal information is being collected, consider how and at what stage of the process you'll collect participant consent.

Onboarding and orientation are great times for capturing and storing participant data. We recommend building data collection and management into your onboarding processes prior to program launch.

Questions to Ask

- If you are using a grant to fund your initial cohorts, what are the deliverables and reporting requirements? Who will be managing those processes?
- What information is necessary beyond the information captured in your institution's application?
- If you are collecting data for institutional research purposes only, how do you want to measure your program's success?
- If protected personal information is being collected, how will you collect participant consent? How will that data be stored? Who will have access to that data?

Participant Support

It is crucial to have academic and career advisors that are deeply connected to the earn-and-learn program as well as institutional processes and services. If possible, we recommend devoting an advising position to the program. A dedicated academic advisor builds relationships with students early in their academic careers and maintains them throughout the students' time in the program. Having a deep understanding of program requirements and relationship with program participants helps Columbus State's ITFA advisors craft an individualized plan for each student based on required coursework.

A cohort structure enables students to progress through the program sharing learning experiences and building a community with their peers. Feeling connected to the program and their peers positively impacts student retention.

Participant Supports offered to Columbus State ITFA students:

- 1-on-1 academic advising and career coaching
- Intrusive advising practices
- Targeted outreach based on student needs
- IT Mentorship events
- Linked In Profile assistance
- Practice Interviews
- Employer Panel
- Second Year/Alumni ITFA Student Panel

Your Pilot Year

START SMALL—FOCUS ON FIRST COHORT

You can always plan for expansion later, but it can be difficult to resolve issues in a program with many employer partners and lots of students—especially if you are building support services from scratch. Treat the launch and the first cohort as a pilot program. There will be areas for improvement and opportunities to streamline processes over that first year. We recommend starting small with one major or certificate program within your IT department and limit the number of apprentices in that first cohort. Finding 1-2 employer partners willing to commit to a specific number of apprenticeships, then limiting your first cohort size according to those opportunities is also a great way to start.

FEEDBACK, EVALUATION & ADJUSTMENT

Tracking and measuring program components to support decision-making and adjustment is critical, especially in your first year. Prepare for data tracking by creating a defined process prior to launch. Columbus State works with third party evaluators to gather and analyze ITFA data. This is a requirement for the grants that support the program. Our evaluators create, distribute, and manage participant surveys. Columbus State uses their analysis to determine program efficacy. Not all institutions will have reporting cycles required by grants, but it's a best practice to collect data from participants so that future programmatic changes can be driven and supported by participant needs.

In addition to data collected during the program intake process Columbus State collects data after major ITFA-related events like Networking Night, Orientation, and Codefest. We use that data to improve those events.

Program Growth and Expansion

PARTICIPANT RECRUITING AND OUTREACH

We recommend involving program advisors, faculty, and staff in planning outreach and mapping recruiting strategies. When creating recruiting plans, consider ways in which your institution's connections can leverage existing relationships.

INTERNALLY

- Ask faculty and advisors in other programs—especially those working with engineering or IT majors not included in the earn and learn program—to discuss earn and learn opportunities with their students
- Present earn and learn programs to students in dual enrollment programs
- Target communication campaigns toward students working toward an associate of arts, an associate of science, or who have not declared a major
- Offer to present or teach short demonstrations during on campus summer camps
- Connect with faculty or staff involved with any K-12 STEM or STEAM program

EXTERNALLY

- Create partnerships and pathways with local STEM, technical, or career-focused high schools
- Teach dual-credit courses—especially the "foundation" courses for your program—on high school campuses
- Partner with local agencies to focus on recruiting restored citizens
- Involve local veterans' organizations and work with local VA vocational rehabilitation counselors
- Include active-duty reserve members in any communication plans to recruit veterans

OUTREACH STRATEGIES

- Large-scale community engagement events
- Panels
- Campus, facility, and lab tours
- Tours of employer's facilities
- On-campus or virtual information sessions
- Off-campus high school recruitment
- Recruitment fairs and conferences
- Marketing campaign
- Traditional outreach campaigns
- Middle/High School summer camps

ANTICIPATING COMMON RECRUITMENT SCENARIOS

"I already have a job"
Inform the potential students that they can work toward a sustainable income, career advancement, tuition sponsorship, and better benefits. Help shift their thinking from having "just a job" to building a sustainable career. Depending on the structure of your program, focusing on the fact that employers will pay a competitive wage while they are in college can make the prospect seem more attainable.

"I'm going to a four-year university"
Some of the best prospects are students who start off saying they don't need a short-term credential.

Working with an employer partner throughout their college journey helps them learn to balance their career, education, and personal pursuits in real-time—making them valuable candidates for colleges and universities as well as employers. Work with employer partners to highlight their policies regarding tuition reimbursement or continuing education benefits.

"I can't pay for school right now"
Another benefit of earn-and-learn programs is that full-time apprenticeship can help offset the costs associated with completing a credential, certificate, or degree. Refer the person to your institution's Financial Aid Office and have a recruiter with working knowledge of your institution's support programs to help explain students' options Remember—filling out a FAFSA is free and doesn't commit them to the program! Direct students to the College's scholarship portal and explore opportunities they may qualify for.

"I can't quit my job and take classes"
Emphasize that your program can be completed by people with caregiving, work, and other responsibilities. Having the support of a recruiter to navigate enrollment processes can also make a potential student feel more confident that they belong in your program. An earn-and-learn program may not be right for that person—a recruiter specializing in your program can help people discern the best option.
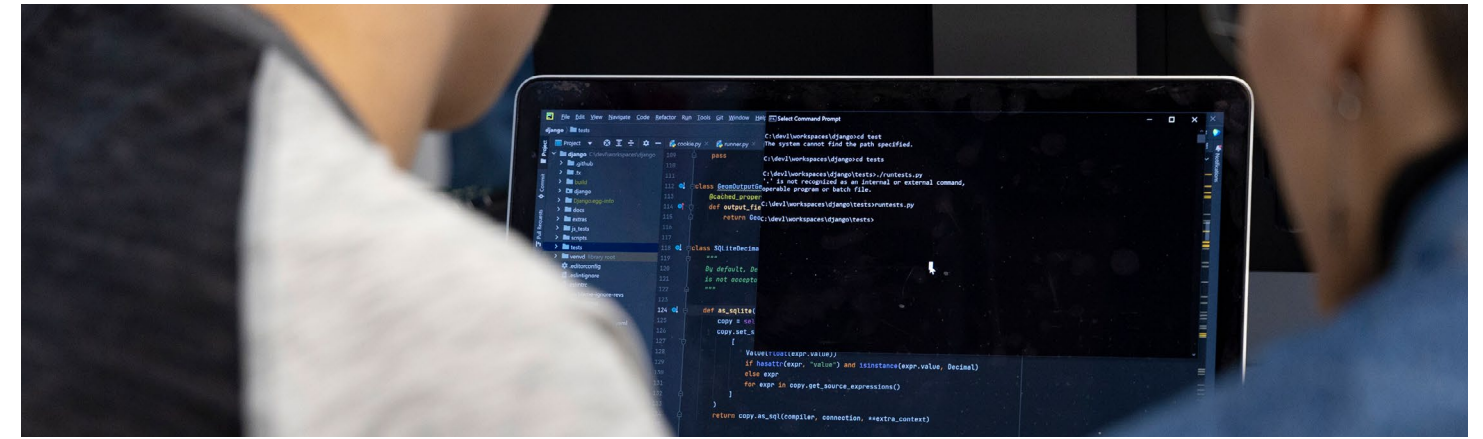
Funding Your Program

It is important to fully understand the cost and benefit implications as well as potential upfront investments of an apprenticeship program. This will be a critical discussion point with leadership to ensure the program is ultimately sustainable. Using staff, faculty, and institutional processes already in place is one way to think about program costs within your institution.

Standing up your earn-and-learn program may include the cost of a program management team; leadership time and effort; investments in establishing sourcing and training relationships; creating or editing a curriculum; and time developing the relevant processes associated with the program.

Run costs will include ongoing investments in training time; potential fees for candidates; recruiting costs; salaries for coaches, mentors, and other support staff. Costs can also include the financial impact of any apprentices who leave the program or ultimately do not convert successfully after the program.

Considering the cost of hosting an apprentice is another critical aspect of standing up your program. It may be helpful to calculate the potential salary differential for an apprentice. Since apprentices will require investments in training and on-the-job learning, pay is sometimes lower than a non-apprentice filling the same role. This differential should be enough to offset the employer's investments, making the run rate economics neutral. In addition, the anticipated added benefit of higher retention in the apprentice population after the completion of the program will be further incentive for your employer partners to hire apprentices. That support could be in the form of scholarships for testing vouchers for industry recognized credentials, stipends to support the salary of the apprentice while they are in the program or other creative ways of leveraging funds.

Columbus State received grants from the National Science Foundation and Department of Labor to support the work of standing up our program. Seeking out similar federal grants or state workforce grants can be helpful in getting a program started, but it's important to brainstorm options for program sustainability beyond the life of those grants.

It may be helpful to consider these categories when creating program budgets:

- Personnel & Fringe Benefits
- Contractual
- Equipment
- Supplies
- Promotions
- Participant Support
- Travel

Acknowledgments