

Fostering Major Readiness through Well Defined 2+2 Pathways: A Multi-Institutional Success Pathways Resource - Poster Session

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This poster presents the development and implementation of effective 2+2 degree maps (Success Pathways) designed to enhance major readiness for prospective transfer students from 8 partner community colleges and 6 other Florida College Schools (FCS). With over 40% of University of Central Florida's (UCF) undergraduate students being transfers, the Success Pathways initiative was designed and implemented to serve as a multi-institutional resource that students can reference during their transfer journey. Since the implementation in Fall 2022, the Success Pathways web resource page has attracted a total web traffic of 191,235 unique users. Thus, serving an actual need.

Colleagues from partner institutions continue to reference the pathways during their coaching and advising interactions with students and have created a ripple effect in the advising and coaching community. Aligned with Wang (2020), these maps emphasize common program prerequisites, essential lower-division coursework, and experiences that should be completed as part of the Associate in Arts or Associate in Science degrees. Building on the work of Jankowski & Marshall (2014), the initiative recognizes that students' course-taking patterns at the community college level significantly influence time to degree and graduation outcomes at the receiving four-year institution.

The poster presentation will highlight key principles for creating coherent academic pathways, address technological constraints encountered during implementation, and outline the core elements of an effective transfer map. Drawing on over five years of institutional data, the presenters will share insights into pathway usage, feedback from academic advisors, and student experiences—offering a comprehensive view of the impact and evolution of these transfer tools.

Context

UCF serves over sixty thousand undergraduate students each year, of which over forty percent transfer (n=26,228, as of fall 2025). Hence there is need to work collaboratively with feeder colleges to align curriculum information for ease of transfer. The University is intentional in increasing transfer student outcomes, specifically, the 3-Year graduation rates, with a big push on major readiness and transfer readiness for transfer students leading to the development of the 2+2 maps with 14 community colleges.

Structural Pieces that Supported the 2+2 Degree Maps

The development of the Success Pathways was grounded in key structural elements at both the state and local levels. At the state level, the Statewide 2+2 Articulation Agreement serves as a foundational pillar. This agreement guarantees students who earn an Associate in Arts (A.A.) degree are admitted into one of Florida’s public four-year institutions, providing a clear and reliable pathway for transfer.

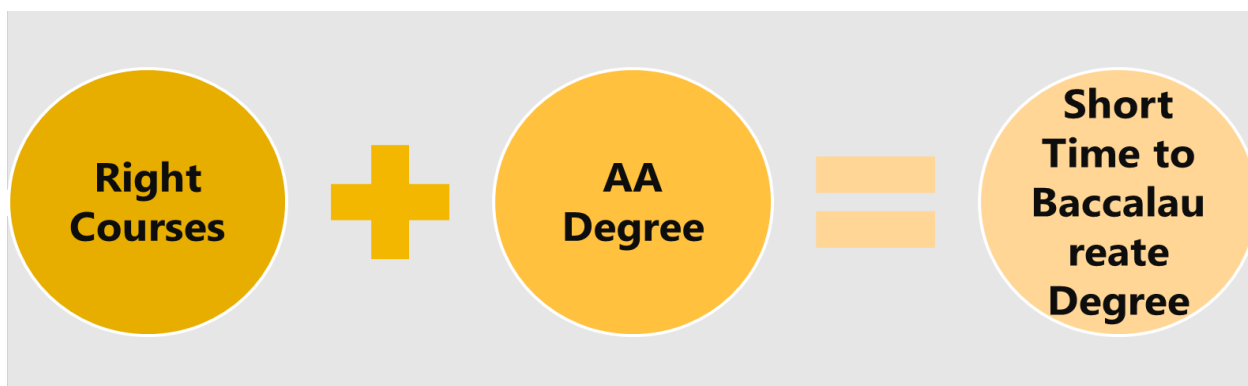
Another essential component is Florida’s common course numbering system, which enables seamless articulation across institutions and minimizes credit loss. This system allowed us to design realistic degree maps tailored to the course offerings at each of the 13 participating community colleges in the Success Pathways initiative.

Locally, the DirectConnect to UCF consortium agreement further strengthened the framework by aligning advising resources, curriculum, and institutional policies to support smooth credit transfer. This alignment was achieved through program-specific articulation agreements, annual convenings, faculty curriculum alignment meetings, and coordinated communication efforts. For example, curriculum alignment discussions helped ensure that A.A. degree requirements were effectively matched with the prerequisites of corresponding B.A./B.S. programs, enhancing the clarity and efficiency of the transfer process.

Why 2+2 Degree Maps/Success Pathways

Consistent with the strategies outlined in the Transfer Playbook 2.0 (LaViolet et.al. 2025), the Success Pathways, also known as 2+2 degree maps, were developed to achieve several key objectives: a) foster major readiness; b) reduce excess credit hours; c) provide accurate, current, and easy to access advising information; d) promote course momentum for transfer students; and e) shorten time to degree completion. This can be accurately represented by a simple formular as shown in Figure 1, below

Figure 1: Why Success Pathways



According to communication materials from the DirectConnect to UCF consortium, major readiness refers to a transfer student having completed a set of intentional actions: a)

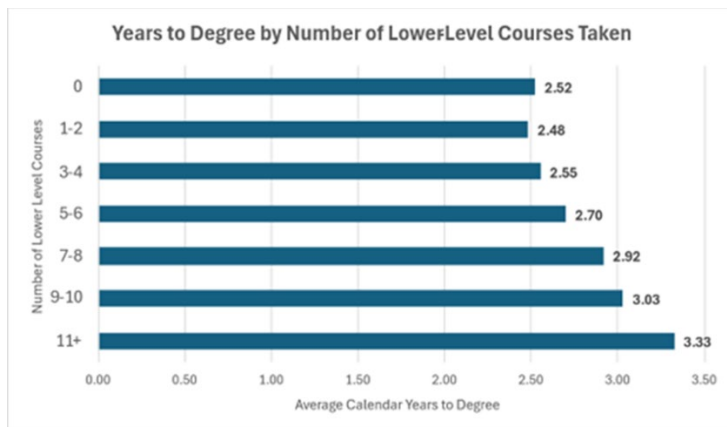
Selected an educational pathway aligned with career, graduate, or professional goals; b) Has an understanding of and has met admission requirements, including common program prerequisites; c) Is prepared to enroll in junior- or upper-level coursework upon transfer. The main assumption is that students who follow and complete these pathways are more likely to graduate on time, achieving the true promise of a 2+2 route to a baccalaureate degree.

Having an associate in arts/science, the right set of courses, and GPA (major readiness) is not the only key to seamless transfer. Rather, the students from community colleges intending to transfer should be “Transfer Ready” (UCF Connect® Website, n.d.). Transfer readiness includes components of major readiness and requires students to have identified relevant high impact practices –such as internships, study abroad, undergraduate research, etc. – that they will need to be successful in their major of choice at the university.

The degree maps also enhance transparency around required coursework, admission criteria, and other program-specific requirements that are often unclear or inconsistently presented in institutional websites or undergraduate catalogs. These maps were designed to equip state college advisors with clear, digestible information they can easily share with students planning to transfer to UCF. For students, the simplified format makes it easier to understand and navigate their academic journey.

Another critical reason for creating the pathways was to promote course momentum. When students complete the appropriate coursework during their A.A. degree, they are better positioned to begin upper-level courses immediately upon transfer, avoiding delays caused by missing prerequisites. Historical data provided by the UCF’s institutional research indicates that students who enrolled in lower-level courses (1000 or 2000) level courses after transfer took longer calendar years to graduate (See Figure 2 below). This is consistent with Hodara, et al., (2017) research which found that there is a cost-saving and time saving imperative for transfer students to complete lower-division coursework while earning an associate in arts or associate in science degree.

Figure 2: Transfer Student Enrollment in Lower-Level Courses in Relation to Time to Degree



Finally, improving the three-year graduation rate for transfer students is a strategic priority for the university. Achieving this goal requires close collaboration with community colleges to ensure students are well-prepared and on the right academic path before transferring.

Development of the 2+2 Degree Maps

The development of the 2+2 degree maps followed a structured, multi-phase process that included: i) Framework Creation – Establishing the guiding principles and structural foundation for the maps; ii) Design and Ideation – Conceptualizing the format and functionality of the resource; iii) Data Collection – Gathering programmatic information from participating institutions; iv) Map Building and Review – Constructing the degree maps and conducting iterative reviews; and v) Ongoing Maintenance – Ensuring the maps remain accurate and up-to-date. Each of the above phases involved collaboration among a diverse group of stakeholders across participating institutions, including academic advisors and coaches, admissions professionals, undergraduate program coordinators, IT specialists, and faculty members. For ongoing maintenance, a central team at the university works closely with undergraduate program coordinators to manage day-to-day updates and ensure the resource reflects current curriculum and transfer requirements.

Insights from the Pathways

Usage: Over the past 2 years, the 2+2 maps have maintained an annual average traffic of 50,000 of unique users across 14 institutions. Through the pathways, we are now able to know the top majors of interest for prospective students from each of the partner institutions (See Figure 3 below).

Figure 3: Top Viewed Majors by Institution

Major by Location Heatmap										
Top 20 - Degree Name	Institution / Total users									Grand total
	valencia-c...	seminole...	daytona...	eastern-fl...	college-o...	lake-sum...	other-inst...	miami-da...	indian-riv...	
computer-science-(b.s.)	4,073	1,332	1,002	1,075	1,036	493	562	238	56	10,048
psychology-(b.s.)	2,631	947	1,194	823	948	517	350	152	56	7,747
nursing-pending-(b.s.n.)	2,287	543	710	669	571	394	240	134	7	5,634
health-sciences-pre-clinical-track-(b.s.)	2,375	760	878	431	714	240	230	-	1	5,629
mechanical-engineering-(b.s.m.e)	1,753	630	564	824	566	256	292	103	27	5,129
accounting-(b.s.b.a.)	1,812	642	450	462	678	244	177	86	64	4,767
information-technology-(b.s.)	1,804	789	405	438	548	277	195	78	34	4,603
biology-(b.s.)	1,463	476	804	520	484	295	184	121	27	4,438
finance-(b.s.b.a.)	1,640	594	429	392	573	211	195	38	7	4,141
kinesiology-exercise-and-sport-physiology-track-(b.s.)	1,794	551	498	404	316	278	204	-	-	4,045
marketing-(b.s.b.a.)	1,504	440	524	384	459	173	152	59	-	3,751
biomedical-sciences-(b.s.)	1,428	491	704	341	406	130	134	-	1	3,673
aerospace-engineering-(b.s.a.e.)	1,135	385	388	627	409	187	167	57	45	3,500
business-economics-(b.s.b.a.)	1,294	341	499	447	428	219	80	36	23	3,429
computer-engineering-(b.s.cp.e.)	1,331	438	343	499	378	127	137	69	34	3,410
digital-media-(b.a.)	1,158	478	470	369	375	236	241	-	1	3,328
management-(b.s.b.a.)	1,267	376	353	331	369	222	169	35	5	3,184
electrical-engineering-(b.s.e.e.)	1,181	359	299	577	255	158	124	50	36	3,082
civil-engineering-(b.s.c.e.)	1,095	373	290	400	305	143	116	45	34	2,870
biomedical-sciences-pre-medical-track-(b.s.)	1,220	352	293	350	303	157	110	-	-	2,816
Grand total (187) ☺	74,925	24,876	23,450	22,890	20,543	10,500	9,355	2,110	669	191,235

We are also able to discern the demographics (age groups) of the users. This information has been useful to the various programs at the University in relation to developing programming or tailored advising resources based on the traffic. The maps have also allowed community college faculty to discern gaps that exist in their curriculum and make programmatic or faculty staffing decisions to address these gaps.

The poster will share excerpts from advisors, administrators and students regarding how they have utilized the 2+2 degree maps. In addition, the poster will also share technology opportunities for developing the 2+2 degree maps.

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