

Advancing San Diego

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Preferred Provider Designation: Software Engineering Talent

Preferred Provider Designation Overview: The purpose of this criteria and application is to identify talent providers that are meeting demand for entry-level software engineers. It was designed based on talent needs of 17 San Diego employers representing multiple industries. They collectively employ more than 53,000 people, and are projected to hire more than 7,000 software professionals by 2022. Through a series of surveys, employers provided individual job growth projections and hiring requirements for software engineers. The result of the working group, a report on [Demand for Software Talent](#), is not meant to reflect the needs of all employers, but outline critical skills required for software engineering jobs or internships, in San Diego.

The designation is offered at two levels: Preferred Providers (full) and Preferred Providers (partial). The key difference is the breadth and depth of knowledge offered to students; Preferred Providers (full) are preparing students for software engineering jobs and Preferred Providers (partial) introduce the foundational skillsets necessary for students to pursue software engineering jobs. Applications for Preferred Providers are accepted from **September 12, 2019 through October 31, 2019.***

Who should apply? Preferred Providers can be any public or private organization or institution that delivers education and workforce training, or any other type of talent services, to employers, learners, and job-seekers, meeting competency requirements defined by industry stakeholders.

Benefits of Preferred Provider designation: The Preferred Provider designation increases access to employers and increases the value proposition of a program for students. Preferred Providers are publicly recognized by employers, and will form a network of faculty, staff, and leaders with priority access to:

- Internships for students within small businesses through the Preferred Provider Internship Fund
- Flexible, wraparound services to support student success in the workplace
- Work-based learning opportunities including networking events, career and internship fairs, local company tours, guest speakers, and more
- Annual briefings with local employers on demand for software talent and other critical jobs

Expectations of Preferred Providers: Talent providers who are granted a Preferred Provider designation will be expected to:

- Appoint a Preferred Provider Coordinator to serve as the organization's key point of contact
- Report required metrics on Preferred Provider programs, including but not limited to: enrollment numbers, completion rates, demographics, and placement rates in both internships and full-time positions
- Identify and refer students for the Preferred Provider Internship Program
- Provide internship preparation and support for the students and identify any additional services required by students to be successful in the workplace
- Participate in periodic survey work conducted by the Advancing San Diego evaluation partner, United Way of San Diego

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Application Instructions

To apply for a Preferred Provider designation, talent providers will articulate a set of courses that, when combined, prepare students for entry-level software engineering jobs (full) or provide foundational skillsets that can lead to software engineering jobs with further education (partial). Applicants must submit course names, numbers, and description of learning activities aligned with requirements in the following categories:

- **Competencies**, defined as what someone should know or be able to do as communicated through tasks performed, tools and technologies used, and knowledge, skills, and abilities.
- **Employability skills**, defined as essential workplace skills needed to be successful in any job, including what are commonly referred to as “soft skills.”

Applicants of Preferred Providers (full) will articulate the set of courses that *prepare students for entry-level software engineering jobs*. Preferred Providers (full) will be asked to report the following metrics:

- Annual enrollment (#) – 2018-19 unduplicated student enrollment/headcount and FTES for the program.
- Graduation (#) – number of unique students who are completing the program within six years of enrollment.
- Employment (%) – percent of students who find employment in the same or similar field as the program of study within 2 years of graduation
- Demographic profile – disaggregated data for 2018-19 students enrolled in the program
- % First Generation College Students - as % of those enrolled in relevant courses in 2018-19

Applicants of Preferred Providers (partial) will articulate the set of courses that introduce the *foundational skillsets necessary to pursue a software engineering job with further education*. Preferred Providers (partial) will be asked to report the following metrics:

- Annual enrollment (#) – 2018-19 unduplicated student enrollment/headcount and FTES for the program. *Program may be defined as a combination of relevant courses.*
- Graduation (#) – number of unique students who are completing the program within three years of enrollment.
- Transfer (#) – number of students transferring to Preferred Provider (full) programs and/or 4-year University in a related major/field of study (most recent annual data available)
- Demographic profile – disaggregated data for 2018-19 students enrolled in the program
- % First Generation College Students - as % of those enrolled in relevant courses in 2018-19

Applications for Preferred Providers of Software Engineering Talent are accepted from September 12, 2019 through October 31st, 2019*. For questions, or to submit your application, please contact Kate Gallagher – ksg@sandiegobusiness.org

**Programs that apply after 10/31/19 will be considered on a rolling basis*



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Application for: Preferred Provider of Software Engineering Talent (full)

This designation means a program produces talent equipped with experience, training, and skills required for an entry-level software job.

In sections 1 and 2, provide an overview of the program or department, including unique characteristics of the training provider, success metrics, and demographics of the students the program serves to the best of your ability.

** If applying for Preferred Provider (partial), use green fields on following pages, only **

Section 1: Applicant Overview	
Institution:	
Program or Department:	
Program contact:	
Program or Department overview (max 500 characters with spaces):	
Section 2: Program Profile (see metrics definitions on page 2)	
Annual enrollment (#):	
Graduation (#):	
Graduates placed in job relevant to area of study (%):	
Employment (%)	
Demographic Profile:	
First Generation College Students (%):	

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Application for: Preferred Provider of Software Engineering Talent (full) – Continued

In section 3, describe how particular courses teach, including to what level of proficiency, required competencies in each area, and preferred categories where applicable.

Section 3: Competencies			
	Competencies:	Course name	Description of Learning Activities
	Programming Languages		(500 characters max per course description)
Required:	Python -or-		
	JavaScript -or-		
	Java -or-		
	C# -or-		
	C++		
Required:	SQL		
	Development Environments		
Required:	Operating Systems (e.g. Linux, Microsoft or MacOS)		
	Virtual Machines		
Preferred:	Software Containers (e.g. Docker or Kubernetes)		
	Software Tools		
Required:	Version Control System (e.g. Git)		
	APIs (e.g. REST)		
	Cloud Computing Platform (e.g. AWS)		
Preferred:	Cross-Platform Framework (e.g. Angular)		
	Technical Skills & Abilities		
Required:	Debugging		
	Agile Software Development (esp. Scrum framework)		
	Build Automation		
	Scalability		
Preferred:	Machine Learning		
	Scripting		
	Employability Skills:		
Required	Problem Solving		
	Critical Thinking		
	Collaboration		
Preferred:	Communication		
	Databases		
Required:	Relational Databases (SQL)		
	Non-Relational Databases (NoSQL)		



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Application for: Preferred Provider of Software Engineering Talent (partial)

This designation means a program produces talent equipped with the foundational skillsets necessary to pursue a software engineering job.

In sections 1 and 2, provide an overview of the program or department, including unique characteristics of the training provider, success metrics, and demographics of the students the program serves.

** If applying for Preferred Provider (full), use blue fields, only **

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Institution:	
Program or Department:	
Program contact:	
Program or Department overview (max 500 characters with spaces):	
Section 2: Program Profile (see metrics definitions on page 2)	
Annual enrollment (#):	
Graduation (#):	
Transfer, if applicable (#):	
Demographic Profile:	
First Generation College Students (%):	

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Application for: Preferred Provider of Software Engineering Talent (partial) – Continued

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	Employability Skills:		
Required	Problem Solving		
	Critical Thinking		
	Collaboration		
Preferred:	Communication		
	Databases		
Required:	None		
Preferred:	Relational Databases (SQL)		