Narrative for Certificate of Completion in
Architecture

1. *Program Goals and Objectives:*

The Architectural Program will culminate in either a two year Associates of Science degree or a Certificate of Achievement in Architecture. This is a collaborative effort to integrate Interior Architectural Design and Architecture with common first year core courses in design and technical skills followed by a specialized second year that branches Interior Architecture and Architecture onto separate tracts.

Architecture Tract Students will acquire the technical skills to enter the workforce as an intern or entry level designer in architecture, interior design, or environmental design firms. Technical skills include visual communications skills such as drafting and presentation work, oral communication skills, project collaboration and management, site and environmental design, and building systems and code compliance.

Architecture and Interior Design have a similar base of students which cross over and will complement each program. The current Interior Design program has students every semester whose goal is to transfer to an architecture program at a university, but interior design courses are not accepted as program requirements at university architecture programs while architecture courses are accepted at interior design programs. Broadening the umbrella to architecture, while keeping the specialization in interior design, will strengthen our student base and enriches the program by providing an environment of professional collaboration.

Program Learning Outcomes, **including Occupational Competencies:**

Upon completion of the program, students will demonstrate the ability to research and analyze critical concepts of design and human interaction within the built environment, understand architecture's role in society, develop environmentally responsible designs, and communicate design concepts through drawing, writing, modeling, and collaboration. Students will develop a portfolio of work displaying design and technical skills to apply as an entry level architectural designer or drafter, or to transfer to a university.

2. *Catalog Description:*

This program explores architecture through cultural, environmental, and social relevance while understanding and addressing critical issues facing the built environment. Innovative design, critical analysis, and communication skills are developed in drawing, writing, modeling, and collaboration. Students completing the AS degree may apply for transfer to a University program in Architecture, Interior Architecture, or Environmental Design or obtain an entry level position in the same fields.

> *Note: After completion of this Architecture program, California students have the option to pursue a license in architecture through the NCARB internship process.*

> *Transfer students: in addition to meeting academic requirements for admittance into a university, Architecture Programs also require prospective students to submit a portfolio to review for admittance into the program. It is recommended that students make an appointment with counselors at the institution of their choice to inquire about requirements.*

3. Program Requirements:

To earn the Associates of Science Degree in Architecture, students must successfully complete the following courses: It is recommended that students complete the courses in the order shown.

Sem	Pre-req or Skills	Course No.	Semester 1	Units	IGETC	CSU
		ARCH 10a	Studio 1 **	3	-	-
		ARCH 10b	Design Communications 1 **	3	-	-
		AHIST 21	Arch History 1	3	3A	C1
		MATH 2	Pre-calc Trig*	5	2	B4
		ENG 1	English 1	3	1A	A2
FALL				**17**		
			Semester 2	**Units**	**IGETC**	**CSU**
	ARCH 10a	ARCH 11a	Studio 2	3	-	-
	ARCH 10b	ARCH 11b	Design Communications 2	3	-	-
		AHIST 22	Arch History 2	3	3A	C1
	ENG 1	ENG 2	English 2*	3	1B	A3
		COMST 11	Public Speaking*	3	1C	A1
SPRING				**15**		
			Semester 3	**Units**	**IGETC**	**CSU**
	ARCH 11a	ARCH 20a	Studio 3: Architecture	3	-	-
	ARCH 11b	ARCH 20b	Design Communications 3	3	-	-
	ARCH 10b	ARCH 60	Construction Materials & Methods	3	-	-
	ARCH 20a	ARCH 70	Portfolio	1	-	-
		BIO 9	Environmental Biology*	3	5B	B2
		GE	*Elective*	3	3B	C2
FALL				**16**		
			Semester 4	**Units**	**IGETC**	**CSU**
	ARCH 20a	ARCH 21a	Studio 4: Architecture	3	-	-
	MATH 2	PHYS 14	Phys 14 w lab*	4	5A/C	B1/3
		GE	*Elective*	3	4	D
		GE	*Elective*	3	4	D
		GE	*Elective*	3	4	D
SPRING				**16**		
			TOTAL	**64**		

* General Education courses are chosen for application in architecture and transferring to a university, but other courses may be substituted. See a counselor for substitutions or recommendations.
** A critical course which is required and predicts success in area of study.

To earn the Certificate of Completion in Architecture, students must successfully complete the following courses:

Pre-req, Skill Advisory Co-req	Course No	Semester 1	Units
	ARCH 10a	Studio 1	3
	ARCH 10b	Design Communication 1	3
ARCH 10a	ARCH 11a	Studio 2	3
ARCH 10b	ARCH 11b	Design Communication 2	3
ARCH 11a	ARCH 20a	Studio 3: Architecture	3
ARCH 11b	ARCH 20b	Design Communication 3	3
ARCH 10b	ARCH 60	Construction Materials and Methods	3
ARCH 20a	ARCH 70	Portfolio	1
ARCH 20a	ARCH 21a	Studio 4: Architecture	3
	AHIST 21	Architecture History 1	3
	AHIST 22	Architecture History 2	3
		TOTAL	**31**

4. *Master Planning*

This program is consistent with SMC's Mission to "assist students in the development of skills needed to succeed in college [and] prepare students for careers…" Students completing the AS degree may apply for transfer to a university for a 5-year professional degree or a 4-year non-professional degree or they may qualify for entry level positions into the careers below.

5. *Enrollment and Completer Projections*

The following labor marketing information was obtained from the attached LMI report:

The Occupational Projections for Employment estimate a 5.6% increase and show the annual average openings to be 1,370.   There are 19,460 employers of architectural and engineering services in the State of California. The percent of total employment for Architectural and Engineering services in the state of California is 68.1%

This program prepares students for the following occupations:

- Architect
- Interior Architect
- Urban Planner
- Environmental Designer
- Industrial Designer
- Furniture and Fixture Designer
- Project Manager
- Drafter and Renderer

6. *Place of Program in Curriculum/Similar Programs*

Estimated Cost of Program Materials and Equipment:
Facility and resources are similar to that of the Interior Design program which is currently supported at the Center for Media and Design. The most practical solution for a classroom is to emulate the professional environment. Students should have work spaces which can accommodate large drawings, space for drawing and modeling, and computers or support for laptops at each station. Laptops would update workstations in the current classrooms to match the professional standard. 30 laptops, the accruements to house and run the laptops, plus the industry software will be needed. The equipment and software would also be utilized by Interior Architecture Program. The cost breakdown is:

30 Laptops:	$60,000
1 Cart:	$ 1,000
Software:	$12,000
TOTAL	$73,000

Current network would support this configuration.

7. *Similar Programs at Other Colleges in Service Area*

Community Colleges within 10 miles:
- *None*

Community Colleges within 10 to 20 miles:
- El Camino Community College: 15 miles

4 or 5 year Transfer Colleges with an Architecture Program in Southern California:
- University of Southern California (Bachelor Program)
- University of California Los Angeles (Bachelor program starts at Junior Level and Masters)
- Woodbury (Bachelor Program in Architecture and Interior Architecture)
- SciArc   (Bachelor Program)
- Otis (Bachelor Program in arch and interior studies)
- California Polytechnic Pomona   (Bachelor Program)
- New School of Architecture in San Diego   (Bachelor Program)

Even without an architecture program, we have 26 students transferring to architecture programs in the UC system between 2012-2017.

8. *Transfer Preparation Information*

The general education courses are chosen for the transfer requirements of University Architecture programs listed above. The required courses offered are consistent with the NAAB (National Architectural Accreditation Board) requirements – two-year programs are not accredited but courses must align to be transferrable.

A. **Critical Thinking and Representation:** Graduates from NAAB-accredited programs must be able to build abstract relationships and understand the impact of ideas based on the research and analysis of multiple theoretical, social, political, economic, cultural and environmental contexts. This includes using a diverse range of media to think about and convey architectural ideas including writing, investigative skills, speaking, drawing and model making,

a. Courses which cover this aspect: Studio 1, Studio 2, Studio 3, Studio 4, English 1, English 2, ComSt 11, AHIST 21, AHIST 22, Design Comm 1, 2, 3

B. **Building Practices, Technical Skills and Knowledge:** Graduates from NAAB-accredited programs must be able to comprehend the technical aspects of design, systems and materials, and be able to apply that comprehension to architectural solutions. Additionally, the impact of such decisions on the environment must be well considered.

a. Studio 2, Studio 3, Construction Materials and Methods

C. **Integrated Architectural Solutions:** Graduates from NAAB-accredited programs must be able to synthesize a wide range of variables into an integrated design solution. This realm demonstrates the integrative thinking that shapes complex design and technical solutions.

a. Studio 1, 2, 3, 4 and Design Comm 1, 2, 3

D. **Professional Practice.** Graduates from NAAB-accredited programs must understand business principles for the practice of architecture, including management, advocacy, and acting legally, ethically and critically for the good of the client, society and the public.

a. Studio 4 will cover some of this information such as the architect's role and responsibilities but most professional practice courses are upper level and will be taught at the university.

Goals for the Program and perspectives that impact education and development of professional architects:

A. **Collaboration and Leadership**
- Students will work on projects which simulate situations found in the profession. They will work on individual solutions and will collaborate in teams to provide an opportunity to understand team dynamics and leadership roles. Architects are expected to serve clients, interact with engineers and professional colleagues, and must be comfortable working with diverse groups and stakeholders.

B. **Design**
- Students will engage in design challenges using as a multi-faceted problem-solving approach that encourages discovery of opportunities and provide a diverse range of ideals and processes.

C. **Professional Opportunity**
- Students will understand the career paths for architects in both traditional and nontraditional settings which include local and global communities. Internships are encouraged and courses are offered to give credit for student internships.

D. **Stewardship of the Environment**
- "Students will understand and take responsibility for stewardship of the environmental and natural resources what are significantly compromised by the act of building and constructing human settlements."

E. **Community and Social Responsibility**
- Students will be engaged in the societal responsibility of creating better places within more livable communities. Civic engagement and positively influencing the built and natural environment.