University San Pablo CEU Escuela Politécnica Superior Madrid

#### Visiting Team Report Visit Two for Substantial Equivalency

#### **Degree in Architecture**



Team room, University San Pablo CEU

The National Architectural Accrediting Board March 10–14, 2014

Date of visit one: November 2012

**Vision:** The NAAB aspires to be the leader in establishing educational quality assurance standards to enhance the value, relevance, and effectiveness of the architecture profession.

**Mission:** The NAAB develops and maintains a system of accreditation in professional architecture education that is responsive to the needs of society and allows institutions with varying resources and circumstances to evolve according to their individual needs.

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#### I. Summary of Team Findings

#### 1. Team Comments and Visit Summary

Visit Two team members representing the National Architectural Accrediting Board (NAAB) would like to extend their thanks to the University San Pablo CEU's administration, faculty, staff, and students for their exemplary preparation and beautiful design of the team room. The student and faculty work was extremely well-organized and made electronically accessible through CEU's computer network. In addition, transportation services, meetings, meals (prepared by the CEU dining facility), and coordination of schedules went well beyond the expected accommodations. The conditions for the visit were ideal on every level.

Team members included two former NAAB directors and two observers who were bi-lingual associates of Spain's Fundación para el Conocimiento madrimasd [madri+d Foundation for Knowledge]. The foundation was established in 2003 by the government and the community of Madrid. As the official accrediting body of Madrid, Madri+d "gives support to the Directorate General for Universities and Research in the definition and implementation of initiatives and programs" [http://www.madrimasd.org]. The observers interpreted documents and assisted with translations during meetings. They also provided the context and substantiated information that was relevant for the review of the professional degree and practice of architecture in Spain.

The team made the following favorable observations, which are described in greater detail elsewhere in this report:

- Commitment to goal and objectives in achieving Substantial Equivalency
- Multilateral support of the program by administrative units
- Excellent physical conditions
- Outstanding interface between faculty and students
- Professional quality of student work

The team agreed that one condition was "Met with Distinction" and eight Student Performance Criteria (SPC) were "Met with Distinction." Five conditions were "Not Met" and two SPC were "Not *Yet* Met." Overall, the visiting team is confident that the CEU program provides and will continue to offer a high-quality education and global perspective of architectural standards.

#### 2. Conditions Not Met/Not Yet Met

Not Met

- I.1.4 Long Range Planning
- I.4 Policy Review
- II.2.3 Curriculum Review & Development
- II.4.1 Statement on Substantially Equivalent Degrees
- II.4.2 Access to NAAB Conditions and Procedures

#### Not Yet Met

- B.3 Sustainability
- C.1 Collaboration

#### 3. Causes of Concern

#### 1.2.4 Financial Resources (diversification of resources/revenue)

Our discussions with the CEU administrators revealed that the primary source of revenue for the architecture program is provided through student tuition. At present there are over 700 students enrolled in an approximately 6.5 year program (5 year + preparation for final degree project). Successful completion of the program leads to an immediate granting of both a degree and license to practice. Thirty percent of the students receive some form of

grant toward tuition. Currently, there appears to be sufficient revenue to offer students a high caliber of instruction and to support the administrators, faculty, and staff. However, as of 2014, Spain's workforce is continuing to experience a 21% unemployment rate, but more importantly--the administration stated that since 2010 the unemployment rate for architects has risen to a staggering 83%. When this topic was brought up with the administration, they emphasized that there is a concerted effort to boost the research and PhD programs along with facilitation of partnerships between other disciplines and programs in Spain and abroad. The administration is welcoming the opportunity to attract international students and global exchanges through its association with NAAB and achievement of Subtstantial Equivalency for CEU's program in architecture.

#### II. Compliance with the Conditions for Substantial Equivalency

#### Part One (I): INSTITUTIONAL SUPPORT AND COMMITMENT TO CONTINUOUS IMPROVEMENT

#### Part One (I): Section 1. Identity and Self-Assessment

**I.1.1 History and Mission**: The program must describe its history, mission and culture and how that history, mission, and culture is expressed in contemporary context. Programs that exist within a larger educational institution must also describe the history and mission of the institution and how that history, mission, and culture is expressed in contemporary context.

The substantially equivalent degree program must describe and then provide evidence of the relationship between the program, the administrative unit that supports it (e.g., school or college) and the institution. This includes an explanation of the program's benefits to the institutional setting, how the institution benefits from the program, any unique synergies, events, or activities occurring as a result, etc.

Finally, the program must describe and then demonstrate how the course of study and learning experiences encourage the holistic, practical and liberal arts-based education of architects.

#### [X] The program has fulfilled this requirement for narrative and evidence

**Visit Two Team Assessment:** The program provided a description of its history, mission, and culture in the APR. At the on-site meetings with faculty and administrators, the team confirmed the findings described in the APR.

#### I.1.2 Learning Culture and Social Equity:

 Learning Culture: The program must demonstrate that it provides a positive and respectful learning environment that encourages the fundamental values of optimism, respect, sharing, engagement, and innovation between and among the members of its faculty, student body, administration, and staff in all learning environments both traditional and nontraditional.

Further, the program must demonstrate that it encourages students and faculty to appreciate these values as guiding principles of professional conduct throughout their careers, and it addresses health-related issues, such as time management.

Finally, the program must document, through narrative and artifacts, its efforts to ensure that all members of the learning community (faculty, staff, and students) are aware of these objectives and are advised as to the expectations for ensuring they are met in all elements of the learning culture.

• Social Equity: The substantially equivalent degree program must first describe how social equity is defined within the context of the institution or the country in which it is located and then demonstrate how it provides faculty, students, and staff with a culturally rich educational environment in which each person is equitably able to learn, teach, and work.

#### [X] The program has demonstrated that it provides a positive and respectful learning environment.

### [X] The program has demonstrated that it provides a culturally rich environment in which each person is equitably able to learn, teach, and work.

**Visit Two Team Assessment:** The learning culture and sense of equity are evident on many levels at CEU and within the program in architecture. Students are supported in several ways: 1) Exam schedules are coordinated by teams of faculty members so that conflicts between scheduled exams and deadlines are avoided; 2) Faculty tutors are assigned to each student every year and provide educational,

professional, and personal advice; and 3) Students also act as peer tutors to one another, offering an additional layer of support. Conversations with students showed that they value the learning culture. Tutoring is done in a large open space and discussions are sometimes videotaped. This system allows students and faculty to collectively participate in further study of issues outside the classroom. Another feature of the program is co-teaching. This standard approach to setting up the lecture courses facilitates mentorship opportunities for new faculty. In addition, co-teaching provides even more flexibility for faculty to have their own practice and research schedule. With respect to cultural richness, student exchanges between Asian architecture programs and CEU expose students and faculty to a broader range of perspectives.

Students expressed one issue of concern. They described the space around the large building that houses the architecture and engineering programs as sterile and unbearable during the hot months. They advocated for the addition of shading devices and plant materials to cool the spaces. The faculty and administration agreed with the students' observations and concerns.

The students also confirmed that there is no organized venue for meeting as a group. They were not aware of any organization similar to the U.S.-based American Insitute of Architecture Student (AIAS).

**1.1.3 Response to the Five Perspectives**: Programs must demonstrate through narrative and artifacts, how they respond to the following perspectives on architecture education. Each program is expected to address these perspectives consistently within the context of its history, mission, and culture and to further identify as part of its long-range planning activities how these perspectives will continue to be addressed in the future.

A. Architecture Education and the Academic Community. That the faculty, staff, and students in the substantially equivalent degree program make unique contributions to the institution in the areas of scholarship, community engagement, service, and teaching.<sup>1</sup> In addition, the program must describe its commitment to the holistic, practical, and liberal arts-based education of architects and to providing opportunities for all members of the learning community to engage in the development of new knowledge.

[X] The program is responsive to this perspective.

**Visit Two Team Assessment:** The academic community at CEU is highly integrated, and administrators, faculty, staff, and students demonstrated a complex range of activities. The architecture program takes pride in its adherence to a classical approach to drawing and at the same time actively participates in a cutting-edge technology exchange with MIT and several other institutions. Cameras are positioned to capture images of the work produced in a fabrication lab at CEU and broadcast 24/7. Faculty and students are working toward achieving a global perspective and reputation through both teaching and research partnerships with local and international academic communities.

**B.** Architecture Education and Students. That students enrolled in the substantially equivalent degree program are prepared to live and work in a global world where diversity, distinctiveness, self-worth, and dignity are nurtured and respected; to emerge as leaders in the academic setting and the profession; to understand the breadth of professional opportunities; to make thoughtful, deliberate, informed choices and; to develop the habit of lifelong learning.

#### [X] The program is responsive to this perspective.

**Visit Two Team Assessment:** Students at San Pablo CEU are its biggest source of pride. They are bright, hardworking, and produce work of the highest quality. Respect and cooperation are

<sup>&</sup>lt;sup>1</sup> See Boyer, Ernest L. *Scholarship Reconsidered: Priorities of the Professoriate*. Carnegie Foundation for the Advancement of Teaching. 1990.

evident throughout the program. Professors give students confidence, and tutors offer advice on projects, professional issues, and even personal topics such as stress management. Students are given leadership opportunities as directors of outreach programs abroad, directors of exhibits, as peer tutors, and as representatives on the school's governance council. Bilateral agreements with schools across the world allow students to continue their studies while gaining international experience. The school's Fab-Lab gives students the opportunity not only to work with those from the CEU tech department but also with other students across the world. Lifelong learning is a way of life in Spain and is encouraged and demonstrated by professors and tutors.

**C.** Architecture Education and the Regulatory Environment. That students enrolled in the substantially equivalent degree program are provided with a sound preparation for the transition to licensure or registration. The school may choose to explain in the APR the degree program's relationship with the process of becoming an architect in the country where the degree is offered, the exposure of students to possible internship requirements, the students' understanding of their responsibility for professional conduct, and the proportion of graduates who have sought and achieved licensure or registration since the previous visit.

#### [X] The program is responsive to this perspective.

**Visit Two Team Assessment:** A degree in architecture in Spain gives graduates the right to practice architecture without any other requirement (Order ECI ECI/3856/2007, of 27 December 2007). Because of this, the education of a student at CEU covers all technical and conceptual topics needed to practice. Curricular content is dictated by the state, and expanded and ordered by the school. The education of a student culminates in a Final Thesis Project. The program at CEU is part of the Bologna Declaration, an agreement among 28 countries to unify higher education standards in the European Union. This agreement allows CEU graduates to work in other EU countries and eases the process of study abroad for students.

**D.** Architecture Education and the Profession. That students enrolled in the substantially equivalent degree program are prepared: to practice in a global economy; to recognize the positive impact of design on the environment; to understand the diverse and collaborative roles assumed by architects in practice; to understand the diverse and collaborative roles and responsibilities of related disciplines; to respect client expectations; to advocate for design-based solutions that respond to the multiple needs of diverse clients and populations, as well as the needs of communities; and to contribute to the growth and development of the profession.

#### [X] The program is responsive to this perspective.

**Visit Two Team Assessment:** CEU organizes master classes with international professionals, which allow students to study a broad range of cultures and alternative ways to approach a professional practice. Almost all of the faculty are practicing architects and provide an essential perspective to their classes. The program's relationship with the College of Architects of Madrid (COAM) links students directly to the profesion. COAM has paired with CEU to organize and host exhibits and competitions, such as TransforMad. The Final Thesis Project jury also has a COAM member who is responsible for offering an external point of view to each student.

E. Architecture Education and the Public Good. That students enrolled in the substantially equivalent degree program are prepared: to be active, engaged citizens; to be responsive to the needs of a changing world; to acquire the knowledge needed to address pressing environmental, social, and economic challenges through design, conservation, and responsible professional practice; to understand the ethical implications of their decisions; to reconcile differences between the architect's obligation to his/her client and the public; and to nurture a climate of civic engagement, including a commitment to professional and public service and leadership.

#### [X] The program is responsive to this perspective.

Visit Two Team Assessment: Students enrolled at the University San Pablo CEU are prepared to be socially committed architects. At the heart of San Pablo CEU's mission is the promotion of a humanistic education with a focus on satisfying the social needs of the public. The foundation's commitment to internationalization helps to prepare students to work not only in Spain but also abroad. Students are given the opportunity to work on projects in Madrid and elsewhere in the world. Examples include class outreach projects in Sierra Leone and the TransforMad Exhibition (which was on exhibit at the City Hall of Madrid during the team visit). The exhibition featured workshops with families and children.

**I.1.4 Long-Range Planning**: A substantially equivalent degree program must demonstrate that it has identified multi-year objectives for continuous improvement within the context of its mission and culture, the mission and culture of the institution, and the five perspectives. In addition, the program must demonstrate that data is collected routinely and from multiple sources to inform its future planning and strategic decision making.

#### [X] The program's processes do not meet the standards as set by the NAAB.

**Visit Two Team Assessment**: The APR described in great detail an *external* long-range planning process set forth by the Spanish government. However, there is no evidence of an *internal*, departmental process for long-range planning.

*I.1.5 Self-Assessment Procedures*: The program must demonstrate that it regularly assesses the following:

- How the program is progressing toward its mission.
- Progress against its defined multiyear objectives (see I.1.4 Long-Range Planning) since the
  objectives were identified and since the last visit.
- Strengths, challenges, and opportunities faced by the program while developing learning
  opportunities in support of its mission and culture, the mission and culture of the institution, and the
  five perspectives.
- Self-assessment procedures shall include, but are not limited to:
  - Solicitation of faculty, students', and graduates' views on the teaching, learning and achievement opportunities provided by the curriculum.
  - o Individual course evaluations.
  - o Review and assessment of the focus and pedagogy of the program.
  - o Institutional self-assessment, as determined by the institution.

The program must also demonstrate that results of self-assessments are regularly used to advise and encourage changes and adjustments to promote student success as well as the continued maturation and development of the program.

#### [X] The program's processes meet the standards as set by the NAAB.

**Visit Two Team Assessment:** CEU engages in assessment at many levels. In addition to the selfassessments outlined in the APR (and then confirmed by the administration), the team learned that there has been an informal exit survey. The Spanish government will be requiring exit surveys in the near future.

#### PART ONE (I): SECTION 2-RESOURCES

#### I.2.1 Human Resources and Human Resource Development

Faculty & Staff:

- A substantially equivalent degree program must have appropriate human resources to support student learning and achievement. This includes full- and part-time instructional faculty, administrative leadership, and technical, administrative, and other support staff. Programs are required to document personnel policies which may include but are not limited to faculty and staff position descriptions<sup>2</sup>.
- Substantially equivalent programs must document the policies they have in place to further social equity or diversity initiatives appropriate to the cultural context of the institution.
- A substantially equivalent degree program must demonstrate that it balances the workloads of all faculty and staff to support a tutorial exchange between the student and teacher that promotes student achievement.
- A substantially equivalent degree program must demonstrate it is able to provide opportunities for all faculty and staff to pursue professional development that contributes to program improvement.
- Substantially equivalent programs must document the criteria used for determining rank, reappointment, tenure, and promotion as well as eligibility requirements for professional development resources.

#### [X] Human Resources (Faculty & Staff) are adequate for the program.

Visit Two Team Assessment: This condition was met with distinction. The curriculum in the architecture program at CEU is designed to support the concept of co-teaching content courses. This shared teaching concept allows faculty and students to mentor one another on many levels. Faculty members with less experience are paired with more senior faculty, or faculty with specializations are able to offer their expertise and have another area of expertise covered by peer faculty. This system of shared teaching in the classroom also allows students to address questions from many perspectives and also get to know a larger number of faculty.

In addition to the system of instruction, the staff has recently undergone consolidation of several programs. The staff described the unification process as having had a positive outcome.

Workloads did not seem to be an issue. Preparation for the NAAB visit was a team effort among the administration, faculty, staff, and students. Everyone who participated in the on-site visit meetings expressed highly favorable views of collaborative exhanges between units and personnel or students. There was an atmosphere of respect and cohesive support evident at all levels of engagement.

#### Students:

- A substantially equivalent program must document its student admissions policies and procedures. This documentation may include but is not limited to application forms and instructions, admissions requirements, admissions decisions procedures, financial aid and scholarships procedures, and student diversity initiatives. These procedures should include firsttime, first-year students as well as transfers within and outside of the university.
- A substantially equivalent degree program must demonstrate its commitment to student achievement both inside and outside the classroom through individual and collective learning opportunities.

#### [X] Human Resources (Students) are adequate for the program.

**Visit Two Team Assessment:** Discussions with the administration regarding financial resources for the students revealed that there were197 students who received grants (30%). Students were offered grants for outstanding performance and economic assistance.

#### I.2.2 Administrative Structure & Governance

 Administrative Structure: A substantially equivalent degree program must demonstrate it has a measure of administrative autonomy that is sufficient to affirm the program's ability to conform to the

<sup>&</sup>lt;sup>2</sup> A list of the policies and other documents to be made available in the team room during a substantial equivalency visit is in Appendix 4 of the 2012 Conditions for Substantial Equivalency.

conditions for substantial equivalency. Substantially equivalent programs are required to maintain an organizational chart describing the administrative structure of the program and position descriptions describing the responsibilities of the administrative staff.

#### [X] Administrative structure is adequate for the program.

**Visit Two Team Assessment:** Discussions with the dean and program administrators revealed that there is a measure of autonomy. The organizational chart describing the administrative structure was provided in the APR. The dean, who is an engineer, was extremely knowledgeable and supportive of the program in architecture. He sees the value of a degree in architecture and facilitates exchanges between research and disciplines.

 Governance: The program must demonstrate that all faculty, staff, and students have equitable opportunities to participate in program and institutional governance as appropriate to the context and culture of the institution.

#### [X] Governance opportunities are adequate for the program.

**Visit Two Team Assessment:** Descriptions of participation opportunities are provided in the APR. Students, staff, and faculty have opportunities to participate in governance bodies within the institution and the program. However, the team pointed out to the administration and students that there is no type of formal governance for architecture students on the CEU campus, such as an AIAS chapter. Because the faculty and students can resolve many issues through the tutoring arrangement, the need for a student "club" or governing body has not been discussed or pursued.

**I.2.3 Physical Resources**: The program must demonstrate that it provides physical resources that promote student learning and achievement in a professional degree program in architecture. This includes but is not limited to the following:

- Space to support and encourage studio-based learning
- Space to support and encourage didactic and interactive learning.
- Space to support and encourage the full range of faculty roles and responsibilities including preparation for teaching, research, mentoring, and student advising.

#### [X] Physical resources are adequate for the program.

**Visit Two Team Assessment:** The architecture program and the entirety of its support spaces are housed in one large modern structure shared with the engineering program. The facility is approximately 35,000 m<sup>2</sup> and features two computer labs, two double-height studios for life drawing classes, and three construction materials technology and structures laboratories, each with machinery for materials testing and research. In addition, there is one model workshop with woodworking tools, laser cutters, and a new CNC machine. The building also houses a cafeteria, supply store, and an MIT fabrication laboratory ("fab lab"), which has 3D printers and a 24-hour web exchange camera. While the program does not have specific studio-based spaces, it does provide open space for all students to work on campus. There is a space dedicated to final thesis project students, and each student is provided with his/her own locker. The main hallway that bisects the building has many tables for students to work in groups and on projects between classes. Faculty members have offices to support the range of work and responsibilities, and 10 seminar rooms are available for group tutoring.

**I.2.4 Financial Resources**: A substantially equivalent degree program must demonstrate that it has access to appropriate institutional and financial resources to support student learning and achievement.

#### [X] Financial Resources are adequate for the program. (This is listed as a Cause of Concern.)

**Visit Two Team Assessment:** (*Please see the summary pages 1–2 of this VTR.*) The team noted, and discussed with the administration, that there were no data comparing the CEU architecture program budget with other architecture programs in Madrid or Spain. In addition, no data were available comparing budgets with other CEU programs/disciplines. The visiting team was given a copy of the architecture program budget on the last evening of the visit, but it was difficult to assess the adequacy or level of financial support based on so little comparative data.

**I.2.5 Information Resources**: The substantially equivalent program must demonstrate that all students, faculty, and staff have convenient access to literature, information, and visual and digital resources that support professional education in the field of architecture.

Further, the substantially equivalent program must demonstrate that all students, faculty, and staff have access to architecture librarians and visual resources professionals who provide information services that teach and develop research, evaluative, and critical thinking skills necessary for professional practice and lifelong learning.

#### [X] Information Resources are adequate for the program

**Visit Two Team Assessment:** The architecture program's library has more than 12,000 books (9,000 on shelves and 3,000 in stacks). There are 171 journal and 59 periodicals subscriptions, several online journals, and 974 architecture-related audiovisual recordings. The catalog is available through the library website. The library facility is located on two floors with comfortable space for documentation and use of resources. The library is open 8:30 to 20:30, Monday through Friday.

#### PART I: SECTION 3—REPORTS

**I.3.1 Statistical Reports.** Programs are required to provide statistical data in support of activities and policies that support social equity in the professional degree and program as well as other data points that demonstrate student success and faculty development.

- Program student characteristics.
  - Number of students enrolled in the substantially equivalent degree program(s).
  - Qualifications of students admitted in the fiscal year prior to the upcoming visit compared to those admitted in the fiscal year prior to the last visit.
  - o Time to graduation.
    - Percentage of matriculating students who complete the substantially equivalent degree program within the normal time to completion for each academic year since the previous visit.
    - Percentage who complete the substantially equivalent degree program within 150% of the normal time to completion for each academic year since the previous visit.
- Program faculty characteristics
  - Number of faculty by rank (e.g., assistant professor, associate professor)
  - o Number of full-time faculty and part-time faculty
  - o Number of faculty promoted each year since the last visit
  - Number of faculty maintaining licenses in the country of the program each year since the last visit, and where they are licensed

#### [X] Statistical reports were provided and provide the appropriate information.

**Visit Two Team Assessment:** The APR includes a table indicating which faculty members are licensed. (A degree in architecture in Spain allows a person to practice as an architect simply by paying the official fees.) Some faculty members practice in other countries, so it is unclear who has a license to practice specifically in Spain.

All requirements related to the student program are met. During the visit meetings with the admissions staff, the admission process for Spanish and incoming students was described. Spanish students are required to pass the "Selectivity Exam" after high school. The content is determined by Royal Decree 861/2010 of 2 July 2010 and Royal Decree 1618/2011 of 14 November 2011.

**I.3.2 Faculty Credentials**: The program must demonstrate that the instructional faculty are adequately prepared to provide an architecture education within the mission, history, and context of the institution.

In addition, the program must provide evidence through a faculty exhibit<sup>3</sup> that the faculty, taken as a whole, reflects the range of knowledge and experience necessary to promote student achievement as described in Part Two. This exhibit should include highlights of faculty professional development and achievement since the last substantial equivalency visit.

### [X] Faculty credentials were provided and demonstrate the range of knowledge and experience necessary to promote student achievement.

**Visit Two Team Assessment:** The faculty exhibit was set up on the mezzanine level of the team room. It provided evidence of an impressive display of scholarly and professional work produced by the faculty.

<sup>&</sup>lt;sup>3</sup> The faculty exhibit should be set up near or in the team room. To the extent the exhibit is incorporated into the team room, it should not be presented in a manner that interferes with the team's ability to view and evaluate student work.

#### PART ONE (I): SECTION 4—POLICY REVIEW

The information required in the three sections described above is to be addressed in the APR. In addition, the program shall provide a number of documents for review by the visiting team. Rather than being appended to the APR, they are to be provided in the team room during the visit. The list is available in Appendix 4 of the Condtions for Substantial Equivalency.

#### [X] The policy documents in the team room did not meet the requirements of Appendix 4.

**Visit Two Team Assessment:** The information required by Appendix 4 of the Conditions for Substantial Equivalency was not provided in the team room during the visit. Therefore, this condition is not met. The information required in the three sections listed for Policy Review as described above was addressed in the APR.

#### PART TWO (II): EDUCATIONAL OUTCOMES AND CURRICULUM

#### PART TWO (II): SECTION 1—STUDENT PERFORMANCE—EDUCATIONAL REALMS & STUDENT PERFORMANCE CRITERIA

The substantially equivalent degree program must demonstrate that each graduate possesses the knowledge and skills defined by the Student Performance Criteria set out below. The knowledge and skills are the minimum for meeting the demands of an internship leading to registration for practice.

The school must provide evidence that its graduates have satisfied each criterion through required coursework. If credits are granted for courses taken at other institutions or online, evidence must be provided that the courses are comparable to those offered in the substantially equivalent degree program.

The criteria encompass two levels of accomplishment<sup>4</sup>:

**Understanding**—The capacity to classify, compare, summarize, explain and/or interpret information.

**Ability**—Proficiency in using specific information to accomplish a task, correctly selecting the appropriate information, and accurately applying it to the solution of a specific problem, while also distinguishing the effects of its implementation.

The NAAB establishes student performance criteria to help substantially equivalent degree programs prepare students for the profession while encouraging educational practices suited to the individual degree program. In addition to assessing whether student performance meets the professional criteria, the visiting team will assess performance in relation to the school's stated curricular goals and content. While the NAAB stipulates the student performance criteria that must be met, it specifies neither the educational format nor the form of student work that may serve as evidence of having met these criteria. Programs are encouraged to develop unique learning and teaching strategies, methods, and materials to satisfy these criteria. The NAAB encourages innovative methods for satisfying the criteria, provided the school has a formal evaluation process for assessing student achievement of these criteria and documenting the results.

For the purpose of substantial equivalency, graduating students must demonstrate understanding or ability as defined below in the Student Performance Criteria (SPC):

**II.1.1 Student Performance Criteria:** The SPC are organized into realms to more easily understand the relationships between individual criteria.

#### Realm A: Critical Thinking and Representation:

Architects must have the ability to build abstract relationships and understand the impact of ideas based on research and analysis of multiple theoretical, social, political, economic, cultural and environmental contexts. This ability includes facility with the wider range of media used to think about architecture including writing, investigative skills, speaking, drawing and model making. Students' learning aspirations include:

- Being broadly educated.
- Valuing lifelong inquisitiveness.
- Communicating graphically in a range of media.
- Recognizing the assessment of evidence.
- Comprehending people, place, and context.
- Recognizing the disparate needs of client, community, and society.

<sup>&</sup>lt;sup>4</sup> See also *Taxonomy for Learning, Teaching and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives.* L. W. Anderson and D. R. Krathwold, eds. (New York: Longman, 2001).

#### A.1. Communication Skills: *Ability to* read, write, speak and listen effectively.

#### [X] Met

**Visit Two Team Assessment:** Course exams in A112 show student ability to effectively read and write. Evidence of the students' ability to speak and listen was observed during the classroom tours and student meetings.

A.2. Design Thinking Skills: *Ability to* raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

#### [X] Met

**Visit Two Team Assessment:** The PFC (Final Thesis Project) shows the students' ability in design thinking skills. Projects in A401 also show evidence of interpretation of information and consideration of diverse points of view.

A.3. Visual Communication Skills: *Ability to* use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.

#### [X] Met (with distinction)

**Visit Two Team Assessment:** Students are taught to use appropriate representational media at the beginning of their career and apply it in A101, A107, and A109. Workshop projects throughout the program, demonstrate outstanding ability in visual communication skills. This SPC has been met with distinction.

A.4. Technical Documentation: *Ability* to make technically clear drawings, write outline specifications, and prepare models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

#### [X] Met (with distinction)

**Visit Two Team Assessment:** Students show the ability to make technically clear drawings in courses A408, A507, A509, and the PFC (Final Thesis Project). Student work in these courses shows a clear ability to depict assembly of materials, systems and components appropriate for a building design. All PFC (Final Thesis Project) projects incorporate an outline specification prepared by the student for the project. This SPC is met with distinction.

## A.5. Investigative Skills: *Ability to* gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

#### [X] Met

**Visit Two Team Assessment:** The PFC (Final Thesis Project) shows extensive student ability to gather, assess, record, apply, and comparatively evaluate relevant information within the design process. Projects from course A401 also show student evidence of assessment, recording, and evaluation of information.

### A.6. Fundamental Design Skills: *Ability to* effectively use basic architectural and environmental principles in design.

#### [X] Met

**Visit Two Team Assessment:** The ability to effectively use basic architectural and environmental principles in desig is evident in architecture and urban design workshop course work throughout the curricula. It is especially strongly indicated in the PFC (Final Thesis Project).

## A.7. Use of Precedents: *Ability* to examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.

#### [X] Met

**Visit Two Team Assessment:** In A411 projects, there is evidence of the students' analysis to examine and comprehend principles in precedents. Incorporation of such principles into architecture and urban design projects is evident in A411, A311, and the PFC (Final Thesis Project).

## A.8. Ordering Systems Skills: *Understanding* of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

#### [X] Met

**Visit Two Team Assessment:** Projects in A102 demonstrate the students' understanding of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

A.9. Historical Traditions and Global Culture: *Understanding* of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.

#### [X] Met

**Visit Two Team Assessment:** The team discussed this SPC at length with the faculty teaching the courses related to historical traditions. Case studies featuring hospitals and also the pilgrimage sites in Santiago were seen as evidence for public health and cultural factors, along with studies and sketches to demonstrate research areas.

A.10. Cultural Diversity: Understanding of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity on the societal roles and responsibilities of architects.

#### [X] Met

**Visit Two Team Assessment:** This SPC also was also the subject of a lot of discussion with faculty. At the end, it was agreed that projects for A401 (Archiectural Design V) demonstrated knowledge of cultural diversity.

## A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

#### [X] Met

**Visit Two Team Assessment:** Evidence of student understanding of the role of applied research in determining function, form, and systems and their impact on human conditions and behavior can be found in projects in course A401 and the PFC (Final Thesis Project).

**Realm A. General Team Commentary: The** CEU program in architecture still regards a classical study of architecture as one of its distinguishing features. The level of investigation through research and drawing is well documented and beautifully demonstrated.

**Realm B: Integrated Building Practices, Technical Skills and Knowledge:** Architects are called upon to comprehend the technical aspects of design, systems and materials, and be able to apply that comprehension to their services. Additionally they must appreciate their role in the implementation of design decisions, and their impact of such decisions on the environment. Students learning aspirations include:

- Creating building designs with well-integrated systems.
- Comprehending constructability.
- Incorporating life safety systems.
- Integrating accessibility.
- Applying principles of sustainable design.
- B.1. Pre-Design: *Ability* to prepare a comprehensive program for an architectural project, such as preparing an assessment of client and user needs, an inventory of space and equipment requirements, an analysis of site conditions (including existing buildings), a review of the relevant laws and standards and assessment of their implications for the project, and a definition of site selection and design assessment criteria.

#### [X] Met

**Visit Two Team Assessment:** The PFC (Final Thesis Project) shows evidence of this SPC. Projects in architectural and urban design workshops throughout the curricula show extensive evidence of analysis of site conditions on multiple scales.

## B.2. Accessibility: *Ability* to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.

#### [X] Met

**Visit Two Team Assessment:** Projects designed for the course A509 demonstrate the students' ability to design sites, facilities, and systems to provide independent and integrated use by individuals with disabilities.

B.3. Sustainability: *Ability* to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.

#### [X] Not Yet Met

**Visit Two Team Assessment:** No evidence of ability to design projects that provide healthful environments for occupants was found. In fact, the team room was constructed with paper products, glues, and paints that caused allergic reactions for two of the team members. The team work area had to be relocated to the mezzanine and windows and doors had to be left open. Fans were run for one

day. However, the other areas of sustainability were well covered and well represented through studio projects and technical drawings. There is also a sustainability laboratory.

### B.4. Site Design: *Ability* to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.

#### [X] Met

**Visit Two Team Assessment:** An ability to respond to site characteristics can be found in workshop projects in courses A401, A409, A502, A507, and the PFC. Design of foundations in different soil conditions is also covered extensivly in course A409.

### B.5. Life Safety: *Ability* to apply the basic principles of life-safety systems with an emphasis on egress.

#### [X] Met

**Visit Two Team Assessment:** Student work produced for the course A509, Design of Environmental Mechanical Systems, indicated a sufficient amount of evidence with zoning diagrams, dimensioning of stairs, calculations, signaling devices, structural resistance to fire and direction of egress diagrams.

B.6. Comprehensive Design: *Ability* to produce a comprehensive architectural project that demonstrates each student's capacity to make design decisions across scales while integrating the following SPC:

A.2. Design Thinking Skills	B.2. Accessibility
A.4. Technical Documentation	B.3. Sustainability
A.5. Investigative Skills	B.4. Site Design
A.8. Ordering Systems A.9. Historical Traditions and	B.7. Environmental Systems
Global Culture	<b>B.9.Structural Systems</b>

#### B.5. Life Safety

#### [X] Met (with distinction)

**Visit Two Team Assessment:** The PFC (Final Thesis Project) is a comprehensively executed project produced by each student before graduation. All aspects of the design process are thoroughly vetted by faculty and external advisors. The goal of the thesis is for students to demonstrate that they have the knowledge to practice upon graduation. The projects are generally large-scale and are investigated with a high level of detail.

B.7 Financial Considerations: *Understanding* of the fundamentals of building costs, such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting.

[X] Met

**Visit Two Team Assessment:** The PFC (Final Thesis Project) requires students to provide construction estimating and calculate project costs for each project at an ability level. A504 exams show student understanding of financial considerations. Operational data for building energy use is calculated by students in A509; however, operational costs are not calculated. This criterion was still judged met.

# B.8. Environmental Systems: *Understanding* the principles of environmental systems' design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.

#### [X] Met (with distinction)

**Visit Two Team Assessment:** Understanding of the systems such as embodied energy, active and passive heating, indoor air quality, solar orientation, and acoustics is demonstrated in A304, Environmental Systems. Daylighting and artificial illumination evidence can be found in A310, Electrical and Lighting systems.

The Final Thesis Project subject shows how students are using this knowledge to improve their designs. A509, Design of Environmental Mechanical System, shows how this requirement of understanding is turned into "ability." This ability is also required by Spanish regulation.

## B.9. Structural Systems: *Understanding* of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.

#### [X] Met (with distinction)

**Visit Two Team Assessment:** Evidence of the students' understanding of the basic principles of structural behavior is shown in second-year subjects A203, Solid Mechanics, and A210, Basic Principles of Structural Behavior. The students must demonstrate this knowledge in structural design competitions organized in A303, Structural Analysis 1, and A309, Structural Analysis 2. Students must design models to demonstrate resistive capabilities. Moreover, the exercises completed for A508, Design of Building Structures, show how students design their own building structures and are able to also produce technical drawings.

# B.10. Building Envelope Systems: *Understanding* of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

#### [X] Met (with distinction)

**Visit Two Team Assessment:** A308, Building Construction 2, and A502, Building Construction Design, show an understanding of building envelope systems. Moreover, in the Final Thesis Projects, students apply the skills to improve and detail a more complex project.

## B.11. Building Service Systems Integration: *Understanding* of the basic principles and appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, security, and fire protection systems

#### [X] Met (with distinction)

**Visit Two Team Assessment:** Specifically, A310, Electrical and Lighting Systems shows the understanding of electrical service systems, and A403 shows plumbing systems. In a more

comprehensive way, A509, Design of Environmental Mechanical Systems, requires every student to design the whole building services for their own project. In that sense, the *understanding* is turned into an *ability*. Moreover, the Final Thesis Project shows how the students are using this knowledge in order to improve and detail a more complex building design.

B.12. Building Materials and Assemblies Integration: *Understanding* of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.

#### [X] Met (with distinction)

**Visit Two Team Assessment:** A204, Building Construction Materials, focuses on the inherent characteristics and performance of materials. The Final Thesis Project subject shows how the students are capable of selecting the appropriate materials, products, and components to improve their own designs. Moreover, extraordinarily well-done detailed drawings for A502, Building Construction Design, demonstrate each student's ability to improve and describe the way building components are assembled.

**Realm B. General Team Commentary:** The criteria designated as "Met with Distinction" were reviewed by the entire team, which included a well-known architect from Spain. The architect also participated in the substantial equivalency visits for two other Madrid institutions. He was able to confirm that the student work at CEU was outstanding in the areas of integrated building practices and technical knowledge and skills.

#### **Realm C: Leadership and Practice:**

Architects need to manage, advocate, and act legally, ethically and critically for the good of the client, society and the public. This includes collaboration, business, and leadership skills. Student learning aspirations include:

- Knowing societal and professional responsibilities
- Comprehending the business of building.
- Collaborating and negotiating with clients and consultants in the design process.
- Discerning the diverse roles of architects and those in related disciplines.
- Integrating community service into the practice of architecture.

### C.1. Collaboration: *Ability* to work in collaboration with others and in multi-disciplinary teams to successfully complete design projects.

#### [X] Not Yet Met

**Visit Two Team Assessment:** No evidence of the students' ability to work in multidisciplinary teams was available. However, architecture students were observed working together on many projects and in quite a few classes. The team enjoyed seeing teams of students create and test (destroy) beams for a structures course. This SPC is not *yet* met.

### C.2. Human Behavior: *Understanding* of the relationship between human behavior, the natural environment and the design of the built environment.

[X] Met

Visit Two Team Assessment: Team members had intense discussions with the CEU faculty on this topic. The issue was human behavior as it relates to the environment—more specifically, to nature as opposed to the built environment. In the end, it was decided that student work and exams demonstrate an understanding.

C.3 Client Role in Architecture: *Understanding* of the responsibility of the architect to elicit, understand, and reconcile the needs of the client, owner, user groups, and the public and community domains.

#### [X] Met

**Visit Two Team Assessment**: Course work produced for A504 and A511 (Professional Practice 1 & 2), demonstrate that programming problems address budget, real estate development issues along with charrette activities to engage the user groups.

## C.4. Project Management: Understanding of the methods for competing for commissions, selecting consultants and assembling teams, and recommending project delivery methods

#### [X] Met

**Visit Two Team Assessment:** A504, Professional Practice in Architecture 1, requires students to understand the methods of competing for commissions, selecting consultants and assembling teams, and recommending project delivery methods. Several exams of this subject show evidence.

C.5. Practice Management: *Understanding* of the basic principles of architectural practice management such as financial management and business planning, time management, risk management, mediation and arbitration, and recognizing trends that affect practice.

#### [X] Met

**Visit Two Team Assessment:** Course work and exams provided in documents for A504, Professional Practice in Architecture 1, offer evidence that students understand the basic principles of architectural practice management.

C.6. Leadership: Understanding of the techniques and skills architects use to work collaboratively in the building design and construction process and on environmental, social, and aesthetic issues in their communities.

#### [X] Met

**Visit Two Team Assessment:** Course work and exams provided in documents for A504, Professional Practice in Architecture 1, demonstrated an understanding of the leadership aspects of professional practice, including the above topics.

C.7. Legal Responsibilities: *Understanding* of the architect's responsibility to the public and the client as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, and historic preservation and accessibility laws.

#### [X] Met

Visit Two Team Assessment: The requirements for this SPC are demonstrated and met in different courses:

- Registration law: A504 Professional Practice in Architecture 1
- Building codes and regulations: A402 Dimension of Structures, A409 Foundations, 509 Design

of Environmental Mechanical Systems, A404 Urban Planning 1, and A410 Urban Planing 2

- Professional service contracts: A504 Professional Practice in Architecture 1
- Zoning and subdivision ordinances, environmental regulation and historic preservation: A404 Urban Planning 1 and A410 Urban Planning 2
- Accesibility laws: A509 Design of Environmental Mechanical Systems.
- C.8. Ethics and Professional Judgment: *Understanding* of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues, and responsibility in architectural design and practice.

#### [X] Met

**Visit Two Team Assessment:** A504, Professional Practice in Architecture 1, teaches students to work according to the "architects' ethic code," which includes social, political, and cultural responsabilities. Specifically, in an exam the students are required to respond to a hypothetical situation in which laws allow a certain behavior but ethics do not.

## C.9. Community and Social Responsibility: *Understanding* of the architect's responsibility to work in the public interest, to respect historic resources, and to improve the quality of life for local and global neighbors.

#### [X] Met

**Visit Two Team Assessment:** A504, Professional Practice in Architecture 1, covers the architect's responsibilities. A404, Urban Planning 1, requires students to respect historic structures and resources.

Realm C General Team Commentary: Many of the SPCs required review of several courses to assess and then meet one or two aspects of a single SPC, which made review difficult. However, once the evidence was located, team members were able to verify that the SPCs for Realm C were all met, with the exception of C.1 Collaboration.

#### PART TWO (II): SECTION 2-CURRICULAR FRAMEWORK

**II.2.1 National Authorization**: The institution offering the substantially equivalent degree program must be or be part of an institution that has been duly authorized to offer higher education in the country in which it is located. Such authorization may come from a federal ministry or other type of agency.

#### [X] Met

**Visit Two Team Assessment:** On page 92 of the APR, evidence was found on the National Authorization for both of the Architecture Degrees offered by the EPS (Program 2001 and Program 2010). The degrees comply with the Royal Decree 4/1994. The Decree dictates the current guideline in Spain for any diploma which entitles the holder to practice as an Architect. These guidelines comply with European Directive 85/384/EC.

Both degrees are in accordance with Spanish Law. Plan 2001 was approved by the "Consejo de Universidades" (Universities Council, the highest advisory body to the Ministry of Education) on 29 May 2001, and published in the Official Gazette in February 2003. In accordance with Spanish Law, Plan 2010 was approved by the "Consejo de Ministros" (Council of Ministers of the Spanish Government) on 16 December 2010, and published in the Official Gazette on 13 August 2012.

**II.2.2 Professional Degrees and Curriculum**: For substantial equivalency, the NAAB requires degree programs in architecture to demonstrate that the program is comparable in all significant aspects to a program offered by a U.S. institution. This includes a curricular requirement that substantially equivalent degree programs must include general studies, professional studies, and electives.

Curricular requirements are defined as follows:

• **General Studies**. A professional degree program must include general studies in the arts, humanities, and sciences, either as an admission requirement or as part of the curriculum. It must ensure that students have the prerequisite general studies to undertake professional studies. The curriculum leading to the architecture degree must include a course of study comparable to 1.5 years of study or 30% of the total number of credits for an undergraduate degree. These courses must be outside architectural studies either as general studies or as electives with content other than architecture.

This requirement must be met at the university or tertiary school level. Post-secondary education cannot be used to meet this requirement. At least 20% of the credits in the professional architecture degree must be outside architectural studies either as general studies or as electives with other than architectural content.

- **Professional Studies**. The core of a professional degree program consists of the required courses that satisfy the NAAB Student Performance Criteria (SPC). The professional degree program has the discretion to require additional courses including electives to address its mission or institutional context.
- **Electives.** A professional degree program must allow students to pursue their special interests. The curriculum must be flexible enough to allow students to complete minors or develop areas of concentration, inside or outside the program.

#### [X] Met

**Visit Two Team Assessment:** This condition is met; however, updates to the program that occurred before the second visit need to be included in the APR. Under "Professional Studies," please note that CEU's architecture program refers to studio courses as "workshops." In addition, it would be helpful to

indicate which "electives" are *specific to the study of architecture* as opposed to other degrees/disciplines offered by CEU.

#### **II.2.3 Curriculum Review and Development**

The program must describe the process by which the curriculum for the substantially equivalent degree program is evaluated and how modifications (e.g., changes or additions) are identified, developed, approved, and implemented. Further, the NAAB expects that programs are evaluating curricula with a view toward the advancement of the discipline and toward ensuring that students are exposed to current issues in practice. Therefore, the program must demonstrate that architects authorized to practice in the country where the program is located are included in the curriculum review and development process.

#### [X] Not Met

**Visit Two Team Assessment:** Although the APR thoroughly discusses the curriculum required and set by the Spanish government, there is no evidence of the internal process utilized by the architecture program administration and faculty at CEU to organize and implement the requirements or changes. There is no evidence of how faculty/staff/students are included in the decision-making process. The team was not able to find evidence of any format or procedure within the department's policies for making changes or updating the curriculum.

#### PART TWO (II): SECTION 3—EVALUATION OF PREPARATORY/PREPROFESSIONAL EDUCATION

Because of the expectation that all graduates meet the SPC (see Part Two, Section 1, above), the program must demonstrate that it is thorough in the evaluation of the preparatory education of individuals admitted to the NAAB substantially equivalent degree program.

In the event a program relies on the preparatory educational experience to ensure that students have met certain SPC, the program must demonstrate it has established standards for ensuring these SPC are met and for determining whether any gaps exist. Likewise, the program must demonstrate it has determined how any gaps will be addressed during each student's progress through the substantially equivalent degree program. This assessment should be documented in a student's admission and advising files.

#### [X] Met

Visit Two Team Assessment: The APR provides information on this condition.

#### PART TWO (II): SECTION 4—PUBLIC INFORMATION

#### **II.4.1 Statement on Substantially Equivalent Degrees**

In order to promote an understanding of the substantially equivalent professional degree by prospective students, parents, and the public, all schools offering a substantially equivalent degree program or any candidacy program must include in catalogs and promotional media the exact language found in the NAAB Conditions for Substantial Equivalency, Appendix 6.

#### [X] Not Met

**Visit Two Team Assessment:** The link to the website provided in the APR was broken. During the visit, the team found that San Pablo CEU had developed a new website since the time the APR was written. Since the link to the Statement on Substantially Equivalent Degrees is no longer available, this condition is not met.

#### **II.4.2 Access to NAAB Conditions and Procedures**

In order to assist parents, students, and others as they seek to develop an understanding of the body of knowledge and skills that constitute a professional education in architecture, the school must make the following documents available to all students, parents, and faculty:

The 2012 NAAB Conditions for Substantial Equivalency

The NAAB Procedures for Substantial Equivalency (edition currently in effect)

#### [X] Not Met

**Visit Two Team Assessment:** The link to the website provided in the APR was broken. During the visit, the team found that San Pablo CEU had developed a new website since the time the APR was written. Since the link to the NAAB Conditions and Procedures is no longer available, this condition is not met.

#### **II.4.3 Access to Career Development Information**

In order to assist students, parents, and others as they seek to develop an understanding of the larger context for architecture education and the career pathways available to graduates of substantially equivalent degree programs, the program must make appropriate resources related to a career in architecture available to all students, parents, staff, and faculty.

#### [X] Met

**Visit Two Team Assessment:** Evidence of Career Development information was confirmed in meetings with Rocío Carvajal, head of the COIE Office. She presented information on the career development services offered to students—including informational meetings for employability and interim offers. She also remarked that the success rate for graduate students is high. The COIE website had many resources and additional information.

#### **II.4.4 Public Access to APRs and VTRs**

In order to promote transparency in the process of substantial equivalency in architecture education, the program is required to make the following documents available to the public:

The final decision letter from the NAAB The most recent APR The final edition of the most recent Visiting Team Report, including attachments and addenda

These documents must be housed together and accessible to all. Programs are encouraged to make these documents available electronically from their web sites.

#### [X] Met

**Visit Two Team Assessment:** There are three hard copies of the final decision letter from NAAB and the most recent APR document from CEU – EPS at the CEU Architecture Library available for review by students, professors and visitors.

#### III. Appendices

#### Appendix 1. Program Information

- A. History and Mission of the Institution and the ProgramUniversity San Pablo CEU, APR, page 1
- B. Long-Range Planning

University San Pablo CEU, APR, page 27

- C. Self-Assessment University San Pablo CEU, APR, page 30
- D. Final Schedule

#### Appendix 2. Conditions Met with Distinction

- I.2.1 Human Resources and Human Resource Development
- A.3 Visual Communication Skills
- A.4 Technical Documentation
- B.6 Comprehensive Design
- B.8 Environmental Systems
- B.9 Structural Systems
- B.10 Building Envelope Systems B.11 Building Service Systems Integration
- B.12 Building Matarials and Assemblies Integration

#### Appendix 3. Visiting Team

*Team chair* Linda Kiisk, AIA, NCARB, LEED<sup>®</sup> AP West Sacramento, CA 95691 307 760 1625 Ikiisk@hotmail.com

*Team member* Amy Perenchio, AIA, NCARB, LEED<sup>®</sup> AP Portland, OR 97217 206 909 5516 <u>amymarie424@gmail.com</u>

*Observer* Guillermo García-Badell, Fundación para el Conocimiento madrimasd 28010 Madrid, España <u>guille.gbadell@gmail.com</u>

*Observer* Jesús Rojo González, Fundación para el Conocimiento madrimasd 28001 Madrid, España jesus.rojo@madrimasd.org

### NAAB Substantial Equivalency Site visit 2

#### Escuela Politécnica Superior USPCEU

NAAB Team	EPS USPCEU Team
Linda Kiisk (Team Chair)	Federico de Isidro (Program Administrator, Head of Architecture)
Amy Perenchio	Fernando del Ama (Director of the Department of Architecture and Design)
	Eduardo de la Peña (Secretary of the Department of Architecture and Design)
Madri+d Team	María Concepción 'Chiqui' Pérez (Academic Secretary of the EPS)
Jesús Rojo	Aurora Herrera (Professor, Team Room Designer)
Guillermo García-Badell	Marta López (Professor, Evidences)
	Maribel Castilla (Professor, Computing)
	Adam Bresnick (Professor, Translation and Communication)
	Isabel Arbaizagoitia (Alumnii, Team Room Designer)
	juan Carlos Sancho (Alumnii, Team Room Designer)

Notes

Where?

PM					
16:00	18:00	Team orientation [w/ACAP Observers]	NAAB Team	Luis Sánchez Jesús Rojo Guillermo García-Badell	Hotel
18:00	19:00	Team orientation+Review of APR+Assignment of Team Responsibilities	NAAB Team	Federico de Isidro Fernando del Ama Eduardo de la Peña 'Chiqui' Pérez Marta López	Hotel
16:00	18:00	Team dinner	NAAB Team	Federico de Isidro Fernando del Ama Eduardo de la Peña Marta López	

TUESDAY, 11 MARCH

MONDAY, 10 MARCH

AM						
8:30	9:00	Travel to EPS USPCEU Campus		Fernando del Ama		
9:00	9:30	Primary Program Administrator	NAAB Team	Federico de Isidro		A.2.3.1
			Madri+d Team	Adam Bresnick		(Team Room)
9:30	10:45	Orientation: Program Presentation by Key Program Faculty	NAAB Team	Federico de Isidro		A.2.3.1
			Madri+d Team	Fernando del Ama		(Team Room)
				Marta López		
				Maribel Castilla		
				Adam Bresnick		
10:45	13:00	Orientation: Team Room + Studio   Class Visits	NAAB Team	Federico de Isidro	Itinerary:	EPS
			Madri+d Team	Fernando del Ama	[10:45] DA1, [11:00] HA2, [11:15] PR8,	
				'Chiqui' Pérez	[11:45] DGA	
				Marta López	[12:00] PR6, [12:15] OTM, [12:30] AF2,	
				Maribel Castilla	[12:45] AF2 Archive	
				Adam Bresnick		
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13:00			NAAB Team Madri+d Team (Jesús Rojo)	Federico de Isidro Eduardo de la Peña Adam Bresnick	José Morillo-Velarde (Subdirector de Centros, FUSP) Coral Barbas (Vicerrectora de Investigación, USP) Luis Perea (Cooperación, EPS) Auxi Gálvez (PFC, EPS)	L.1.1.1
14:00 14:15	15:45	Tour of Program Facilities, Information and Digital Resources, Library, Labs, Shops	NAAB Team Madri+d Team Federico de Isidro Fernando del Ama Eduardo de la Peña	Itziar Muñoz & Librarians Covadonga Lorenzo (Model Shop) Epifanio Lorenzo (Fab Lab) Maribel Castilla (Lab) Auxi Gálvez (PFC) José María Serra (OT FUSP)	Itinerary: Model Shop, Fab Lab, PFC Shop, Building Structures Lab, OT FUSP, EPS Library, PFC	EPS
15:45	16:00	Break				
16:00	17:00		NAAB Team Madri+d Team	EPS Architecture Faculty		Aula Magna (Yellow Room)
17:00	18:00	Team Review of Exhibits	NAAB Team Madri+d Team			A.2.3.1 (Team Room)
18:00	18:30	Travel to COAM				
18:30			NAAB Team Madri+d Team Federico de Isidro Fernando del Ama Eduardo de la Peña Marta López	José Antonio Granero (COAM, Dean) Santiago de Molina (COAM, IA) Elena Rdgz Manzaneque (COAM, DS) Carlos Lahoz (COAM, MTT)	COAM Hortaleza, 63. 28004 Madrid +34 91 595 15 00 www.coam.org	COAM HQ
19:15	19:45	Return to Hotel				
19:45		Team-only Dinner and Debrief				

#### WEDNESDAY, 12 MARCH AM

AM						
8:30	9:00	Travel to EPS USPCEU Campus		Marta López		
9:00	9:30	Primary Program Administrator	NAAB Team Madri+d Team (Guillermo García-Badell)	Federico de Isidro Adam Bresnick		D.2.4.3 (Sala de Juntas)
9:30	10:15	Entrance Meeting with School Director Dr. David Dantos Mejía and Direction Team	NAAB Team Madri+d Team	David Santos (EPS Dean) Federico de Isidro Fernando del Ama Eduardo de la Peña 'Chiqui' Pérez Gutiérrez Adam Bresnick		D.2.4.3 (Sala de Juntas)
10:15	10:30	Break				
10:30	11:30	Entrance Meeting with Vice Rectors and General Secretary (USP)	NAAB Team Madri+d Team	Coral Barbas (VR de Investigación, USP) David Santos (EPS Dean, EPS)	Alberto Díaz Romeral (General Secretary, USP)	D.2.4.3 (Sala de Juntas)
11:30	11:40	Break				
11:40	12:00	Studio   Class visits	NAAB Team Madri+d Team	Federico de Isidro Fernando del Ama Adam Bresnick	Itinerary: [11:40] AE2 (lab), [11:50] PRI	EPS
12:00	12:45	Team Review of Exhibits	NAAB Team Madri+d Team			A.2.3.1 (Team Room)
12:45	13:00	Meeting with Program Administrative and Staff	NAAB Team Madri+d Team	'Chiqui' Pérez (only introduction)	Santiago Pariente Ascensión Almagro	D.2.4.3 (Sala de Juntas)

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PM						
13:00		Team Lunch with Students Leaders   representatives [No program faculty or administrators]	NAAB Team Madri+d Team	Clara Abella Eduardo Chamorro Pablo Benito Jorge Borondo Adrián Bilbao Guillermo Álvarez de la Puente	Celia Garrido Guillermo Fernández Villar Victoria Castillejo Cristina Rocher Ignacio Peña	L.1.1.1
14:00	14:15	Break				
14:15	15:15	Entrance Meeting with Students [No Program Faculty or Administrators]	NAAB Team Madri+d Team	EPS Architecture Students		Aula Magna (Yellow Room)
15:15	15:30	Break				
15:30	16:00	Team Meeting with School + Program Budget Officers	NAAB Team Madri+d Team	Oscar Dïez (Gerencia, FUSP)	Eduardo de la Peña Fernando del Ama	D.2.4.3 (Sala de Juntas)
16:00	16:30	Team Meeting with Admissions   Advising   Financial Aid	NAAB Team Madri+d Team	Leopoldo Abad (VR Alumnos) Mercedes PrzCastells (Admission)	Patricio Herráez (Financial Aid)	D.2.4.3 (Sala de Juntas)
16:30	17:30	Team Review with RRII   NNTT   COIE   Calidad	NAAB Team Madri+d Team	Rocío Carvajal (COIE, USP) Belén Hermida (RRII, USP)	Félix Hernando (Director de NNTT, FUSP) Pablo Redondo (Calidad. USP)	D.2.4.3 (Sala de Juntas)
17:30	18:30	Reception w/ Faculty, Program Alumni and Local Practitioners	NAAB Team Madri+d team	Faculty Alumnii Practitioners		L.1.1.1
18:30	19:00	Team Review of Exhibits	NAAB Team Madri+d Team			A.2.3.1 (Team Room)
19:00	19:30	Team-only Dinner and Debrief	NAAB Team Madri+d Team			A.2.3.1 (Team Room)
19:30	22:30	Team Review of Exhibits	NAAB Team Madri+d Team			A.2.3.1 (Team Room)
22:30		Return to Hotel				

#### THURSDAY, 13 MARCH

AM					
8:30	9:00	Travel to EPS USPCEU Campus		Marta López	
9:00	9:30		NAAB Team Madri+d Team	Federico de Isidro	A.2.3.1 (Team Room)
9:30	13:00	i i i i i i i i i i i i i i i i i i i	NAAB Team Madri+d Team		A.2.3.1 (Team Room)
13:00	13:30	Team-only Lunch and Debrief	NAAB Team Madri+d Team		A.2.3.1 (Team Room)

PM						
13:30	15:20	Complete Review of Program Exhibits	NAAB Team Madri+d Team			A.2.3.1 (Team Room)
15:20	15:30	Break and meeting with Francis Keré (visiting lecturer)	NAAB Team Madri+d Team	Diebedo Francis Keré	Federico de Isidro Covadonga Lorenzo (EPS)	A.2.3.1 (Team Room)
15:30	19:00	Complete Review of Program Exhibits	NAAB Team Madri+d Team			A.2.3.1 (Team Room)
19:00	19:30	Team-only Dinner and Debrief	NAAB Team Madri+d Team			A.2.3.1 (Team Room)

19:30	21:00	Complete Review of Program Exhibits, drafting of VTR	NAAB Team		A.2.3.1
			Madri+d Team		(Team Room)
21:00	21:15	Short meeting with Primary Program Administrator	NAAB Team	Federico de Isidro	A.2.3.1
			Madri+d Team		(Team Room)
21:15	22:45	Complete Review of Program Exhibits, drafting of VTR			
22:45		Return to Hotel			

#### FRIDAY, 14 MARCH

#### AM

#### Hotel Checkout

		Travel to EPS USPCEU Campus   Team Room		Fernando del Ama		
9:00	10:00	Exit Meeting with Primary Program Administrator, School Dean & EPS	NAAB Team	David Santos (Dean, EPS)	Fernando del Ama	D.2.4.3
		USPCEU Team	Madri+d Team	Federico de Isidro		(sala de juntas)
10:00	10:30	Exit Meeting with University Rector, Vice-Rectors, General Secretary	NAAB Team	Juan Carlos Dominguez (Rector)	Coral Barbas (VR Investigación)	D.2.4.3
			Madri+d Team	Alberto Díaz Romeral (General Secretary)	Leopoldo Abad (VR Alumnos)	(sala de juntas)
10:30	11:00	Exit Meeting   Forum with Faculty	NAAB Team	EPS Architeccture Faculty		Aula Magna
			Madri+d Team			(Yellow Room)
11:00	11:30	Exit Meeting   Forum with Students	NAAB Team	EPS architecture Students		Aula Magna
			Madri+d Team			(Yellow Room)
11:30	11:45	Team Departure				

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IV. Report Signatures

Respectfully Submitted,

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Linda Kiisk, AIA, NCARB, LEED<sup>®</sup> AP Team chair

Amy Perenchio, AIA, NCARB, LEED<sup>®</sup> AP Team member

Guillermo García-Badell, Fundación para el Conocimiento madrimasd Observer

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Jesús Rójo González, Fundación para el Conocimiento madrimasd Observer

Program Response

#### SOME FINE TUNING OF POINTS RAISED IN THE VTR

These notes or either formal or informative of the VTR

#### 3. Causes of Concern 1.2.4 Financial Resources (diversification of resources/revenue)

In Spain an architect principal activity is Professional labor, and the majority are freelance, it is difficult to find data and sources about current employment figures. Different sources provide contradictory data. We have asked the Dean of the College of Architects for a statement. He writes:

"Since 2008 in Spain there has been an 80% fall in the activity of professionals related to building, and the sector has a 60% rate if unemployment. Nevertheless the process of recuperation has started, based primarily in the rehabilitation of buildings, urban renovation and regeneration, and especially emphasis on sustainability and energy efficiency; areas where an architect's expertise is required."

"Desde 2008 en España se ha producido un 80% de caída de la actividad de los profesionales vinculados a la edificación y el sector tiene más de un 60% de paro, aunque ya se ha iniciado un proceso de recuperación, basado fundamentalmente en la política de rehabilitación de edificios, renovación y regeneración urbana, con especial énfasis en la sostenibilidad y la eficiencia energética, campos en los que la intervención del arquitecto es fundamental".

#### 1.1.2 Learning Culture and Social Equity

Student representatives have an office and mailbox (Room S.2.4.1). It is underused and we have realized that many students do not know that it exists. Perhaps there is a lack of interest by the students to organize and create a student association.

#### **I.2.5 Information Resources**

The library has extended hours during recesses and holidays, including Christmas break and Easter week and during exam periods (January and June-July) it opens Saturdays and Sundays.

#### **I.3.1 Statistical Reports**

Revising the chart posted in the Team Room provides the following numbers:

- 78 professors in the program are registered in the different Colleges of Architects around Spain (the Colleges are organized according by province)
- 3 professors registered with the Colegio Oficial de Ingenieros de Caminos de Madrid (College of Civil Engineering)

In Europe there exists free movement of Professionals between countries in the Union, and legislation supports this movement.

Some Professors work professionally in other countries but we are unsure in what capacity (either freelance or within a company)

#### **B.9. Structural Systems**

The correct name and code for Basic Principles of Structural Behavior is: A210 Structural Systems

#### II.4.1 Statement on Substantially Equivalent Degrees

As indicated in the VTR, the Universidad San Pablo CEU webpage has been re-designed and is currently being updated. A webpage for the information for the NAAB is under construction and may be found at this address:

http://www.uspceu.com/es/facultades-escuelas/escuela-politecnica-superior/\_extra/acreditacionnaab/index.php

#### II.4.2 Access to NAAB Conditions and Procedures

As indicated in the VTR, the Universidad San Pablo CEU webpage has been re-designed and is currently being updated. A webpage for the information for the NAAB is under construction and may be found at this address:

http://www.uspceu.com/es/facultades-escuelas/escuela-politecnica-superior/\_extra/acreditacionnaab/index.php

#### II.4.3 Access to Career Development Information

Information about the latest employment survey (May 14, 2014): Alumni graduated in the architecture program until July 2013: **462** Respondents: **336** 

- Graduate employees: 303 (90.2%)

- Unemployed graduates: 33 (9.8%)

- Graduates in Spain: 215 (64.0%)

- Graduates abroad: 121 (36.0%)

(UK: 8.9%, China 6.5%, Germany 3.6%, Netherlands 2.1%, Canada: 1.8%; Panama: 1.5%, Switzerland 1.5%, other: 10.1%)

Source: survey of COIE, USP CEU