

<u>Mode of Certification</u>: Royal Architectural Institute of Canada Syllabus Program

7. Application for Academic Certification for Royal Architectural Institute of Canada Syllabus Program

710 – 1, Nicholas Street Ottawa, Ontario Canada K1N 7B7 Telephone: (613) 241-8399 Fax: (613) 241-7991 E-mail: <u>info@cacb.ca</u> Website: <u>www.cacb-ccca.ca</u>

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1. Background

The Canadian Architectural Certification Board was established in 1976 by an agreement of the Registration Authorities and Councils of the provincial architectural licensing authorities, to assess and certify the academic qualifications of <u>individuals holding a professional degree/diploma in architecture</u> in accordance with criteria and procedures contained in the Canadian Education Standard for Admission to Provincial Architectural Associations in Canada. L'Ordre des architectes du Québec joined the CACB in 1992.

2. Requirements for Registration

Prior to registration with any of the provincial associations of architects in Canada, applicants must have their academic qualifications certified by the CACB. Following certification of their academic qualifications, applicants are then required to complete the licensing requirements for the province in which they wish to be registered.

Registration requirements vary from province to province and may be affected in each province from time to time by new legislation or changes in provincial bylaws. Further information concerning requirements for registration should be obtained from the provincial authority concerned. Information may be obtained by writing to:

Architectural Institute of British Columbia

100 - 400 Cambie Street * Vancouver, British Columbia * V6B 2N5 tel: 604.683.8588 * fax: 604.683.8568 * e-mail: registration@aibc.ca * website: www.aibc.ca

Northwest Territories Association of Architects

P.O. Box 1394, Yellowknife, NWT X1A 2N8 tel: 867.920.2609 * fax: 867.873.3654 * e-mail: nwtaa@yk.com * website: www.ntwaa.ca

Alberta Association of Architects

Duggan House * 10515 Saskatchewan Drive * Edmonton, Alberta * T6E 4S1 tel: 780.432.0224 * fax: 780.439.1431 * e-mail: info@aaa.ab.ca * website: www.aaa.ab.ca

Saskatchewan Association of Architects

642 Broadway Avenue, Suite 200 * Saskatoon, Saskatchewan * S7N 1A9 tel: 306.242.0733 * fax: 306.664.2598 * e-mail: <u>execdir@saskarchitects.com</u> * website: <u>www.saskarchitects.com</u>

Manitoba Association of Architects

137 Bannatyne Avenue, 2nd Floor * Winnipeg, Manitoba * R3B 0R3 tel: 204.925.4620 * fax: 204.925.4624 * e-mail: info@mbarchitects.org * website: www.mbarchitects.org

Ontario Association of Architects

111 Moatfield Drive * Don Mills, Ontario * M3B 3L6 tel: 416.449.6898 * fax: 416.449.5756 * e-mail: <u>oaamail@oaa.on.ca</u> * website: <u>www.oaa.on.ca</u>

Ordre des architectes du Québec

1825 René Lévesque Boulevard West * Montreal , Quebec * H3H 1R4 tel: 514.937.6168 * fax: 514.933.0242 * e-mail: <u>info@oaq.com</u> * website: <u>www.oaq.com</u>

Architects' Association of New Brunswick

P.O. Box 5093 * Sussex, New Brunswick * E4E 5L2 tel: 506.433.5811 * fax: 506.432.1122 * e-mail: aanb@aanb.aibn.com * website: www.aanb.org

Nova Scotia Association of Architects

1361 Barrington Street * Halifax, Nova Scotia * B3J 1Y9 tel: 902.423.7607 * fax: 902.425.7024 * e-mail: mdauphinee@nsaa.ns.ca * website: www.nsaa.ns.ca

Architects Association of Prince Edward Island

P.O. Box 1766 * Charlottetown, Prince Edward Island * C1A 7N4 tel: 902.368.2300 * fax: 902.566.9214 * e-mail: aapei@wcarch.com

Newfoundland Association of Architects

P.O. Box 5204, Station A * St. John's, Newfoundland * A1C 5V5 tel: 709.726.8550 * fax:: 709.726.1549 * e-mail: nlaa@newfoundlandarchitects.com * website: www.newfoundlandarchitects.com

3. Assessment Procedure

In the fulfilment of its degree certification mandate, the CACB has set up an Assessment Committee which meet approximately every four to six weeks with the CACB Registrar, to review the academic credentials of all applicants for certification. The Assessment Committee consists of eight members appointed by the CACB.

- (i) The requests for assessment of academic qualifications are evaluated in the order they are received. Applications are added to the waiting list once all requested documentation is submitted.
- (ii) An initial evaluation of the documentation submitted by the applicant is performed by the CACB staff and additional documentation is requested if necessary.
- (iii) A detailed evaluation is prepared by the CACB staff and presented along with the applicant's submission to the Assessment Committee for their consideration.
- (iv) The Assessment Committee members meet with the Registrar to decide if the academic qualifications of the applicant meet the requirements of the Canadian Education Standard for admission to provincial architectural associations.
- (v) The outcome may be:
 - that the applicant's academic qualifications meet the requirements of the Canadian Education Standard and a Certificate of Certification is issued; or
 - further clarifications of the applicant's academic qualifications is required; or
 - that the Assessment Committee is unable to complete its assessment based on the documentation submitted and request an interview; or
 - that the Assessment Committee determines that the applicant's academic qualifications are deficient in particular subject areas; the applicant is then requested to eliminate those deficiencies by successfully completing courses approved by the CACB;
 - that the applicant's academic qualifications do not meet the requirements of the Canadian Education Standard and the CACB.
- (vi) Applicants are notified of the assessment's result by mail.

Applicants should expect <u>up to three months to be informed of the result after</u> submission of their completed application form and <u>all</u> requested documentation.

Please note that neither certification nor registration is required in order to accept employment in an architectural office in Canada. However, no person can use the term "architect" nor hold himself /herself out as an architect unless registered with a provincial association.

4. The submission

Your submission must include the following documents:

- (i) A completed application form / pages 5 to 12.
- (ii) Official transcript of record or certified¹ true copy thereof, showing grade or standing achieved in each subject for each year of the course in architecture completed.

Where an applicant has been required to complete post-secondary studies as an admission requirement of the School of Architecture, an Official Transcript of Record or certified true copy thereof, of those studies <u>must also be submitted</u>.

- (iii) Certified¹ true copy of the official translation of the transcripts if the original documents are not in French or English.
- (iv) Certified¹ true copy of all degrees, must be submitted even though the conferring of such degree title may appear on another document, i.e. official transcript of record.
- (v) Certified¹ true copy of the official translation of degrees if the original documents are not in French or English.
- (vi) Official University Calendar describing the professional program in architecture undertaken by the applicant or equivalent documentation (Course Syllabus).

It is very important that the university calendar be for the years you were attending the university and that it contains:

- the description of the content of every individual courses;
- the number of hours of lectures and the number of hours of studio spent on each course;
- the number of terms in an academic year;
- the number of weeks of studies per term.
- (vii) Certified true copy of the official translation of the university calendar if original document is not in French or English. (Note: we only require the translation of the sections related to your program me in architecture).
- (viii) List of the academic design projects completed throughout the programme in architecture, as well as a brief description of each project in a maximum of 4 pages. This should be done by the applicant.
- (ix) Portfolio of academic design. Although the submission of a portfolio of academic design work is not mandatory with the initial application, it is strongly recommended that applicants submit one in order to expedite the certification process.

When submitting a portfolio of school work, it should be made of copies **(no originals)** of individual work produced within a regular design studio of the Architectural programme. The portfolio shall include at least the final (last) design project of the said program and/or two other projects produced in the last two years of the program.

Dimensions of submissions: $8\frac{1}{2} \times 11$ " to 11" $\times 17$ " folded into $8\frac{1}{2} \times 11$ " Format: Mechanical binding and soft cover

(x) Cheque or money order in the amount of **\$1,213.62** (\$1,074.00 + 13% HST) to cover the assessment fee. *(payable to the Canadian Architectural Certification Board)*

¹ Certified by: the emitting institution, a lawyer, a notary, or a commissioner of oaths.

Applicant Information

(Please type or print clearly)

Name		Miss Ms Family Name	•
Address			
City	Province	Postal Code	
Telephone: Residence	Busines	S	
E-mail:	Fax:		
I intend to seek registration in the Prov	ince of		

Education Information

Level of Education	Institution	City/Province/Country	Years
Degree Institution			
Other Degree			
Post-Secondary Institutions (PSI)			to
Please indicate if you	r studies in archited	cture were full-time or part-time	

Language of Instruction:

Declaration

•

- I certify that all information provided in this application "form and attached documents" is true and accurate to the best of my knowledge.
- I understand that an approval of this application or any Certificate issued to me may be revoked without notice if any information in this application is subsequently found to be false or misleading.
- I understand that the "submission" (ie. application form and all required documentation) become the property of CACB and will not be returned to me at any time.
- I further understand that this application will not be processed by the CACB until <u>all</u> required documentation is received.

Data		
	Data	
Dale	Dale	

Mr.

Mrs.

Instructions for completing the application form

Legend

For <u>each</u> course completed indicate the following parameters:

Subjects:	Distribute the courses in your program of studies among the 6 subject areas.
No.:	This column is intended for the number of the courses completed as listed in the University calendar, e.g. "Arch 76.210".
Title:	This column is intended for the course title as listed in the University calendar, e.g. "Building Construction 1".
Year:	This column is intended for the year the applicant undertook that course.
PSI:	In the case of studies undertaken in more than one post-secondary institution, indicate the institution where the course was completed with a numerical code (1, 2, 3); use the space at the bottom of the page, labeled "PSI" to identify each post-secondary institution to which the numerical codes refer.
Grade:	This column is intended for the final grade or standing achieved of the course completed.
Туре:	O - check "O" for an obligatory course E - check "E" for an elective course
Hours/Weeks:	For each course, indicate the number of hours per week devoted to (L) - Lecture (S) Studio/Lab.
No. of weeks:	This column is for the number of weeks per academic term as listed in the University calendar.
%:	The % column is used to determine the percentage applicable to each subject when a course is listed in more than one area because its subject matter substantially overlaps.
Total # of hours:	Compile the total (L + S) X number of weeks X the percentage applicable (%) = Total number of hours. Calculate the Total number of hours at the bottom of the page.
Comments:	Use the space labeled "Comments" to provide any further information needed to clarify each area for the assessment committee.

See Appendix "A" - The Canadian Education Standard for admission (registration or licensing) to provincial architectural associations in Canada for the standard applied when assessing academic qualifications.

AREA 1 - GENERAL EDUCATION

Subjects		Courses compl	eted			Ту	pe		urs/ eek	No. of	%	Total number
-	No.	Title	Year	PSI	Grade	0	Е	L	s	Weeks		of hours
1. English or French compositions defined as written communication that explains, interprets, analyses or presents and supports a point of view, utilizing the principles and conventions of standard language.												
2. Humanities are defined as the academic disciplines that study the human condition through the recognition, comprehension, analysis and interpretation of various forms of art and literature												
3. Social Sciences are defined as the study of the social life of human groups and individuals through the analysis of economic, historical, political, psychological and sociological aspects of society.												
4. Mathematics is defined as the logical study of quantities, magnitudes, arrangement and change, and of the methods for using rigorously defined self consistent symbols to make their properties and exact relationships known, either in the abstract or in their practical applications												
5. Natural Sciences is defined as the study of the physical universe, and is divided into two general areas: biological science and physical science.												
				Total	Number	of Ho	urs					
Comments					1				PS	SI		·
					2							

AREA 1 - ELECTIVE SUBJECTS

Subjects		Courses comp	leted			Ту	vpe		urs/ eek	No. of	%	Total number
-	No.	Title	Year	PSI	Grade	0	E	L	S	Weeks		of hours
Any additional university courses in any one or more than the 6 areas or specialized elective subject outside of the professional program).												
				Total	Number	of Ho	urs					
Comments					1				PS	51		
					2							

Subjects		Courses comp	leted			Ту	pe		urs/ eek	No. of	%	Total number
	No.	Title	Year	PSI	Grade	0	Е	L	S	Weeks		of hours
1. History of Architecture is defined as the study of construction by which human needs have been satisfied and human aspirations have been met.												
2. Human Behavior is defined as the study of characteristics and behavior of individuals and groups, including those with varying physical abilities, that relate to the physical environments in which they function, and to the process of environmental modification and change												
				Total	Number	of Ho	urs					
Comments					1			I	PS	SI		
					2	<u> </u>		<u> </u>				

AREA 3 - ENVIRONMENT

Subjects		Courses	complete	d			Ту	ре		urs/ eek	No. of	%	Total number
	No.	Title	Ye	ear	PSI	Grade	0	Е	L	S	Weeks		of hours
Environment is defined as the basic principles of ecology as well as the actions with respect to environmental and resource conservation in architecture and urban design for which the architect is responsible. It includes the constructed artifacts and service infrastructure as well as the climatic, geographic and other natural characteristics of the site that influence the setting for architecture science.													
					Total	Number	of Ho	urs					
Comments						1				PS	51		
						2							

AREA 4 – DESIGN AND GRAPHIC COMMUNICATION

Subjects		Course	es completed			Ту	pe	Hours/ Week		No. of	%	Total number
-	No.	Title	Year	PSI	Grade	0	Е	L	s	Weeks		of hours
Levell Individual learning experiences within a non- building spatial context; familiarity with spatial analysis, design process; design literacy; research skills.												
Level II Simple projects with emphasis on the natural environment, user space studies and further skill development; introduction of qualitative technical material; the use of precedents in architecture and urban design; a minimum proficiency in the design and communication of simple buildings with a basic understanding of construction and structural systems; data analysis, programming, site analysis and design.												
Level III Simple and complex building studies with qualitative technical input; total building synthesis developed; a general proficiency in the complete design of simple buildings and design for accessibility; development of collaborative skill; a minimum ability to deal with complex buildings and multi-building complexes; site analysis and design.												
Level IV General proficiency in the total synthesis of complex buildings and related systems; integration of technical information; social and environmental ramifications of planning and architecture; project emphasis on advanced building design, planning and urban design. Level IV work must indicate a mastery of data collection, research and analysis, programming, planning, design, graphic communication, structures, building systems, landscape and site design and other related knowledge.												
				Total	Number	of Ho	urs					
Comments									PS	61		<u> </u>
					1 2							

AREA 5 – TECHNICAL SYSTEMS

Subjects		Course	s completed			Ту	Туре		Туре		Туре		urs/ eek	No. of	%	Total number
•	No.	Title	Year	PSI	Grade	0	Е	L	s	Weeks		of hours				
1-Structural Systems are defined as the basic structural elements of a building, their interaction as a support system, the forces that act on or in buildings and the principles and theory upon which an understanding of these systems is based. An acceptable sequence of study should include the theory of structures, (including statics, principles of equilibrium and stability, resolution of forces, shear and bending moments, strength and mechanics of materials, analysis of structural elements, and sizing of structural members.) and the design of structures, (including the selection and design of structural systems in wood, steel and concrete appropriate to a variety of building types and span conditions.).																
2-Environmental Control Systems are defined as building elements that pertain to the modification of the microclimate for the purpose of human use and comfort. An acceptable sequence of study will include theory and applications in the areas of heating, air conditioning, lighting (natural and artificial), plumbing, waste and fire control systems, building core systems and acoustics. Studies will also develop an understanding of related issues such as energy efficiency and alternative energy systems and strategies, health and safety codes and requirements, and environmental quality.																
3-Construction Materials and Assemblies are defined as the characteristics of building materials and how they are made and applied in a building project. An acceptable sequence of study will include properties and behavior of materials, performance of materials and assemblies under use, material selection and detailing, the building industry, codes and standards affecting the design and construction of buildings, construction sequences and procedures, and relative economies of material and component choices.																
				Total	Number	of Ho	urs									
Comments					1			<u> </u>	PS	61						
					2											

AREA 6 – KNOWLEDGE OF THE PROFESSION

No.	Title	Year	PSI	Grade	0	E	L	S	Weeks		of hours
			Total	Number	of Ho	urs					
				1			·	PS	61		
				Total		1	Total Number of Hours	1	Ps 1	PSI	PSI

Checklist of documents

Have you enclosed ?

- □ Completed application form.
- □ Was the application form filled out as per the instructions listed on page 6 ?
- □ An official transcript of record or certified true copy thereof of all studies relevant to your architecture degree.
- \Box Certified true copy of the official translation of the transcripts.
- □ Certified true copies of degrees.
- □ Certified true copies of the official translation of the degrees.
- □ University calendar describing all programs including architecture.
- Does the university calendar contain all the necessary information as requested by CACB ?
- □ Certified true copy of the official translation of the university calendar describing all programs including architecture.
- □ List of academic design projects as well as a brief description of each project.
- □ Cheque or money order of **\$1,213.62** (\$1,074.00 + 13% H.S.T.) in Canadian funds payable to the Canadian Architectural Certification Board
- Portfolio of school work

Conditions and Procedures for the Certification of Educational Qualifications

Required for Admission (Registration or Licensing) to The Architectural Licensing Authorities In Canada

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DEGREE PROGRAMMES in ARCHITECTURE

Appendix A

PART A PRINCIPLES OF A CANADIAN EDUCATION STANDARD

Provincial and Territorial legislation has given each professional governing body both the authority and the responsibility to establish standards of competence for candidates seeking to practise architecture in their jurisdiction. Each jurisdiction has chosen to have this professional competence normally obtained and demonstrated through a combination of formal **education**, supervised **experience** and **examination**. Each jurisdiction may also, under extraordinary circumstances, exempt a candidate from some of these normal requirements if competency can be demonstrated by other reliable means.

The Canadian Architectural Certification Board (CACB) was established in 1976 by an agreement of the Councils of the *Canadian Architectural Licensing Authorities* (*Regulators*), who grant it the authority to act on their behalf in assessing the **educational qualifications** of individuals holding a professional degree or diploma in architecture. The assessments are made in accordance with standards and procedures established by the Regulators. L'Ordre des architectes du Québec joined the CACB in 1992, and the Northwest Territories Association of Architects in 2002.

The CACB is governed by a Board of Directors (the **Board**), which establishes the policies of the CACB. The Board appoints a **Registrar** who is empowered to issue a *Certificate of Educational Qualifications* to persons so qualified, and **Assessment Committees** who act on behalf of the Board and recommend to the Registrar.

The CACB procedures for Certification, and the education standards against which qualifications are measured, have been developed in accordance with both the core principles of the UNESCO/UIA Charter for Architectural Education and the relevant sections of the UIA Accord on Recommended International Standards on Professionalism in Architectural Practice. The CACB, acting on behalf of the Regulators, is part of working agreements with the National Architectural Accrediting Board (USA) and the National Council of Architectural Registration Boards (USA), and is a signatory to the Canberra Accord on Architectural Education, which was ratified in 2008 for implementation in 2010.

CACB Certification

Normally, applicants must have their academic qualifications certified as having met the educational requirement for entry to the profession by the CACB prior to, or as a part of, the application process for registration or licensure with any of the *Canadian Architectural Licensing Authorities*. The assessment of credentials for certification is conducted in accordance with Parts B and C of this document. Following **certification** by the CACB that their academic qualifications meet the standard established by the Regulators, applicants are required to complete the remaining requirements for the province or territory in which they wish to be registered or licensed. These requirements vary from jurisdiction to jurisdiction and may be affected from time to time by new

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legislation or changes in bylaws. Current information concerning requirements for registration or licensure should be obtained from the *Regulator* concerned.

Canadian Standards & Procedures

Those current competency standards that are expected, by a consensus of the Regulators, to be achieved and demonstrated through **formal education** have been applied to the development of standards and procedures for the assessment of both professional degrees accredited by the CACB or NAAB, and professional degrees or diplomas **not** accredited by the CACB or NAAB. These standards and procedures have been chosen to assure that the assessments are equitable in each case, while accommodating the varied backgrounds and circumstances of the applicants. This results in standards for each category of applicant that are **equivalent** but **not identical**.

PART B CONDITIONS and PROCEDURES for CERTIFICATION

Conditions

1. Accredited Professional Degree

Applicants may be granted CACB certification that their education meets the standards for entry to the profession following graduation from a professional program of architectural education that has been accredited by the CACB, by the National Architectural Accrediting Board (NAAB), or by any other body recognized by the Regulators. While this document outlines the procedures for the Certification of an individual applicant's accredited degree, the detailed procedures and standards for the evaluation of architecture programs seeking or maintaining accreditation are described in the document *CACB Conditions and Procedures for Accreditation of Professional Degree Programs in Architecture (Appendix A)*. These *Conditions and Procedures* are meant to be applied to university professional programs in architecture during a periodic accreditation process, and not to the credentials of individual graduates. An accredited professional degree may be granted at either the Bachelor's, the Master's or the Doctor's level. Pre-professional degrees in architectural studies by themselves, and post-professional degrees in related fields do not satisfy the requirements in this section.

2 Degree or Diploma Not Accredited by the CACB

Applicants with a valid degree or diploma in architecture that is a first professional degree or diploma and is accepted as a requirement for registration or licensure in its country of origin, but is **not** accredited by the CACB or the NAAB, may apply for CACB certification to determine whether their education, or the degree program, meets the curriculum standards of Part C-2 and in the judgment of the CACB, the candidate's work meets the performance standards of Part C-3 of this document. This includes a graduate from a currently accredited Canadian school of architecture whose degree was granted prior to the school being accredited by the CACB.

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The process involves a detailed evaluation of the individual's academic record. The requirements for this evaluation are described in Part C, *Procedures and Standards for Assessment of Non-accredited Degrees or Diplomas.*

Applicants who have received a *Graduate Diploma in Architecture* from the *RAIC Syllabus of Studies*, may be granted CACB Certification following a review of the requisite courses and guided studies, against the performance standards described in Part C of this document.

3. Architects Registered Prior to Adoption of the Certification Process

The Regulators have agreed that Architects who were registered or licensed prior to July 1, 1976 by a provincial association, or by the Ordre des architectes du Québec prior to 1992, or whose education was certified by the Universities Coordinating Council in Alberta prior to 1992, are accepted as having equivalent education to satisfy the Canadian Education Standard, and may be granted CACB Certification upon application.

Procedures

Following is a summary of the Procedures followed for Certification in each of the categories identified noted above:

1. Accredited Degrees/Programs

Application Forms and detailed instructions for Certification under this category are available online at < <u>www.cacb-ccca.ca</u> >.

Upon receipt of an *Application for Certification of Academic Qualifications*, all required supporting documentation and any required fee, CACB staff will verify eligibility under this category and the Registrar will issue a Certificate.

2a Non-accredited Degrees or Diplomas

Application Forms and detailed instructions for Certification under this category are available online at <<u>www.cacb-ccca.ca</u> >. Note that a separate application form and submission requirement are available for graduates from a currently accredited Canadian school of architecture whose degree was granted prior to the school being accredited by the CACB. The CACB will assess the content of the degree program in accordance with the procedures detailed in Part C below.

Upon receipt of an *Application for Assessment of Academic Qualifications,* all requested supporting documentation and any required fee, CACB staff will first verify the applicant's eligibility under this category. Eligible applications will be sent to an Assessment Committee that will assess the applicant's submission, against the curriculum and performance standards of Part C, and will recommend to the Registrar. Upon approval by the Assessment Committee, the Registrar will issue a Certificate.

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2b Graduate Diploma from the RAIC Syllabus of Studies

Application Forms and detailed instructions for Certification under this category are available online at < <u>www.cacb-ccca.ca</u> >.

Upon receipt of an *Application for Assessment of Academic Qualifications*, all required supporting documentation and any required fee, CACB staff will verify eligibility under this category, the Assessment Committee will assess the applicant's submission against the *Performance Standards* of Part C, with special consideration for the nature of work/study programs, and will recommend to the Registrar. Upon approval by the Assessment Committee, the Registrar will issue a Certificate.

3. Architects Registered or Licensed Prior to Adoption of the Certification Process

Application Forms and detailed instructions for Certification under this category are available online at < <u>www.cacb-ccca.ca</u> >.

Upon receipt of an *Application for Certification of Academic Qualification "Under the Grandfathering Right Clause*" and all required supporting documentation CACB staff will verify eligibility under this category and the Registrar will issue a Certificate.

4. Removing Education Deficiencies

If an assessment identifies deficiencies in an applicant's professional degree/diploma program when compared with the Curriculum and Performance Standards below, one or more of the following options may be selected to remove the deficiencies:

4.1 If the deficiency is in the general education and elective subject area, relevant courses may be taken at any university, including the *RAIC Syllabus of Studies*, or at a community college that has been approved by the CACB prior to enrolment in the courses.

4.2 If the deficiency is in history, human behavior, environment, technical systems or professional practice subject areas, relevant courses may be taken at any school of architecture whose professional degree program is accredited by the CACB or through the *RAIC Syllabus of Studies*. Courses taken at institutions without a CACB accredited program may be accepted if approved by the CACB prior to enrolment in the courses. If an academic institution grants credit in relevant subjects on the basis of equivalency examinations administered by the institution, and if that credit is listed on an official transcript issued by that institution, then that credit may be used to remove deficiencies in these subject areas.

4.3 If the deficiency is in the design subject area, on-campus or off-campus

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design studios may be taken at or through an institution with a CACB accredited program, or through the *RAIC Syllabus of Studies Program*. Such studios must be administered or monitored by the design faculty and must be taken for academic credit.

When deficiencies have been removed, official transcripts and/or equivalency examination score reports must be sent to the CACB directly by the academic institution(s) and/or examination authority involved. If the applicant has been previously issued a Conditional Certificate, the CACB will verify that the conditions have been met and, following approval by the Registrar, a regular Certificate will be issued.

5. Review and Appeals

5.1 If an applicant for certification should disagree either with the conclusion that their credentials are not eligible for assessment under a category, or with a ruling of an Assessment Committee, an appeal may be made in writing to the CACB.

The CACB offers to the applicant, without extra cost, the possibility to first ask for a review of his or her application before moving forward for an appeal. Upon receipt of a written request for review, including the applicant's reasons for the review and any documented information that may affect the review, the applicant's file is sent back to the Assessment Committee for reassessment.

If the application was considered not eligible for assessment because the applicant is unable to submit the required documentation due to extraordinary personal circumstances, the Assessment Committee may, at their discretion, require alternate evidence of educational achievement, including an oral examination and/or properly documented post graduate professional work.

The applicant will be notified of the results of the review in writing.

5.2 If an applicant for certification has received a written response from the CACB to a request for reconsideration of an eligibility or assessment decision and believes the evaluation is still in error, an appeal may be made in writing to the CACB Board of Directors. The Letter of Appeal should include the applicant's reasons for the appeal and any documented information that may support the appeal.

5.3 The Board of the CACB will review the applicant's letter of appeal, the Assessment Committee report, and the educational credentials at its next scheduled meeting. The Board may seek clarification from the staff of CACB, the Assessment Committee or the applicant. If the Board agrees with the applicant, it may direct the Registrar to issue a Certificate or a Conditional Certificate. The applicant will be notified of the decision of the Board in writing. No further appeal to the Board is possible.

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PART C.

PROCEDURES and STANDARDS for ASSESSMENT of NON-ACCREDITED DEGREES or DIPLOMAS

1 Assessment Procedures

In assessing non-accredited degrees or diplomas for Certification, the following Course Equivalents and Performance Standards contained in Part C are used. This ensures consistency of application and fairness of assessments across the diverse types of programs available.

The CACB will determine whether the degree is a recognized first professional degree or diploma. The *Curriculum Standards* are then applied to the degree or diploma for a preliminary evaluation, which relates an individual record to a CACB-accredited degree equivalent. Eligibility is determined on the basis of the length, structure and general content of the courses being evaluated and their substantial conformance with the *Curriculum Standards*. In determining eligibility, the evaluators assign the applicant's academic work to the six required subject areas, in accordance with semester hour equivalents as detailed below.

During this stage of the assessment, CACB staff may request further information in order to complete the applicant's file. If the file is determined to be in substantial compliance with the quantitative requirements of the *Curriculum Standards*, the application is forwarded to the CACB Assessment Committee for final assessment. If the degree or diploma is considered not eligible under this category, the applicant is notified in writing, and a portion of the application fee may be refunded.

The CACB Assessment Committee meets regularly to assess applications. The Assessment Committee considers the detailed course content as documented in the applicant's file to confirm that the *Performance Standards* outlined in Part C/Section 3 have been met.

The outcome of the assessment may be:

- that the applicant's academic qualifications fulfill the educational component of the registration/licensure requirements in Canada and a Certificate is issued by the Registrar; or
- that the Assessment Committee determines the applicant's academic qualifications to be deficient in particular subject areas and the applicant is required to remove those deficiencies by successfully completing the appropriate courses of study approved by the CACB. In this case, and on a recommendation from the Assessment Committee, the Registrar may issue a Conditional Certificate; or
- that the applicant's academic qualifications do not fulfill the educational component of the registration/licensure requirements in Canada.

Applicants are notified of the result of an assessment or of a Registrar's decision in writing, and the assessment process normally takes from 3 to 6 months from the time that the application, including all required documentation, is complete. If the Registrar

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does not grant Certification, an applicant may undertake additional studies, and then reapply for Certification.

2 Curriculum Standards

The CACB evaluation accommodates recognized types of professional degree programs, the most common being:

Bachelor of Architecture Program - requiring a minimum of five years of study (or 4 years following CEGEP in Quebec), or

Master of Architecture Program - requiring a minimum of three years of study following an unrelated bachelor's degree, or two years following a four-year, related pre-professional degree; and does not preclude variations approved by the CACB.

The CACB degree equivalent requires 160 semester hours of academic credit, grouped into six subject areas:

- general education and electives;
- history and human behavior;
- environment;
- design and graphic communication;
- technical systems;
- knowledge of the profession, which also includes the legal and administrative context of architectural practice.

In determining course equivalency, the evaluators assign the applicant's academic work to the subject areas in accordance with semester hour equivalents. A semester hour is equivalent to 1 hour of CACB approved lecture or 2 hours of CACB approved laboratory/studio instruction per week for the duration of the semester or term. For programs that operate on a quarter system, 1.5 quarter hours are equivalent to 1 semester hour. A course may consist of instruction in more that one subject area, so may be apportioned between subject areas as appropriate.

If the degree or diploma is determined to meet the CACB equivalent degree in length and general content, the academic record is evaluated against the *Performance Standards* required for the subject areas detailed below. This two-part assessment is the basis for the Assessment Committee's recommendation to the Registrar. The *Performance Standards* are consistent with, but not identical to, the *Student Performance Criteria* found in the CACB's *Conditions and Procedures for Accreditation*, which are used in the evaluation of university professional programs in architecture.

THE SIX SUBJECT AREAS

GENERAL EDUCATION AND ELECTIVE REQUIREMENTS

A professional degree program must provide a foundation of general education, including studies with other than architectural content that imparts general knowledge and develops the students' intellectual capacity to undertake professional studies. This enables them to see their professional studies in the broader context of the natural, cultural and social world.

A professional degree program must also allow students to pursue their special interests. The curriculum must be flexible enough to allow students to complete minors or develop areas of concentration that are outside of architectural studies, either as general studies or as electives with other than architectural content.

Course Equivalents

At least 32 semester hours of credit in: English or French Composition Humanities Social Sciences Mathematics Natural Sciences

A minimum of 2 semester hours of English or French composition, or an acceptable language proficiency test demonstrating adequate compositional skills, 6 semester hours in the Humanities or Social Sciences and 6 semester hours in Mathematics or the Natural Sciences are required. The remaining 18 semester hours may be taken in any of the five subject areas. These courses may be included either as an admission requirement or as part of the professional degree curriculum.

English or French Composition is defined as written communication that explains, interprets, analyses or presents and supports a point of view, utilizing the principles and conventions of standard language. Courses in English or French literature are not acceptable in this subject, but are acceptable in the subject of Humanities.

Courses in English or French as a foreign language are not acceptable.

Humanities are defined as the academic disciplines that study the human condition through the recognition, comprehension, analysis and interpretation of various forms of art and literature.

Studio and performing art courses are not acceptable in this subject, but may be acceptable as electives.

Social Sciences are defined as the study of the social life of human groups and individuals through the analysis of economic, historical, political, psychological and sociological aspects of society.

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Mathematics is defined as the logical study of quantities, magnitudes, arrangement and change, and of the methods for using rigorously defined self-consistent symbols to make their properties and exact relationships known, either in the abstract or in their practical applications.

Natural Science is defined as the study of the physical universe, and is divided into two general areas: biological science and physical science.

ELECTIVE SUBJECTS

Course Equivalents

Studies to total the Board approved equivalent of 160 semester hours of credit are required. The 24 semester hours required beyond the minimums listed may be taken in any one or more of the six subject areas and/or specialized elective subjects outside of the professional program.

PROFESSIONAL EDUCATION REQUIREMENTS

HISTORY OF ARCHITECTURE AND HUMAN BEHAVIOUR

Course Equivalents

At least 18 semester hours of credit in:

History of Architecture – at least 12 semester hours Human Behavior – at least 6 semester hours

History of Architecture is defined as the study of construction by which human needs have been satisfied and human aspirations have been met.

Human Behavior is defined as the study of characteristics and behavior of individuals and groups, including those with varying physical abilities, that relate to the physical environments in which they function, and to the process of environmental modification and change.

ENVIRONMENT

Course Equivalents

At least 3 semester hours of credit in: Environment

Environment is defined as the basic principles of ecology as well as the actions with respect to environmental and resource conservation in architecture and urban design for which the architect is responsible. It includes the constructed

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artifacts and service infrastructure as well as the climatic, geographic and other natural characteristics of the site that influence the setting for architecture.

DESIGN and GRAPHIC COMMUNICATION REQUIREMENT

Course Equivalents

At least 50 semester hours of credit, including a Level IV design studio sequence.

Design is defined as analysis, synthesis, judgment and communication which architects use to understand, bring together, assess and express ideas which lead to a built project.

Design studies are divided into four levels, not necessarily corresponding to the year of instruction. These levels are:

Level I Individual learning experiences within a non-building spatial context; familiarity with spatial analysis, design process; design literacy; research skills.

Level II Simple projects with emphasis on the natural environment, user space studies and further skill development; introduction of qualitative technical material; the use of precedents in architecture and urban design; a minimum proficiency in the design and communication of simple buildings with a basic understanding of construction and structural systems; data analysis, programming, site analysis and design.

Level III Simple and complex building studies with qualitative technical input; total building synthesis developed; a general proficiency in the complete design of simple buildings and design for accessibility; development of collaborative skill; a minimum ability to deal with complex buildings and multi-building complexes; site analysis and design.

Level IV General proficiency in the total synthesis of complex buildings and related systems; integration of technical information; social and environmental ramifications of planning and architecture; project emphasis on advanced building design, planning and urban design. Level IV work must indicate a mastery of data collection, research and analysis, programming, planning, design, graphic communication, structures, building systems, landscape and site design and other related knowledge.

Basic Design studies, courses in graphic communication, computer assisted design and photography may be used to fulfill Level I requirements. Levels II-IV must be satisfied by the completion of studio courses. Completion of a comprehensive studio in Level III or Level IV is required.

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TECHNICAL SYSTEMS REQUIREMENT

Course Equivalents

At least 24 semester hours credit in:

Structural Systems - at least 6 semester hours Environmental Control Systems - at least 6 semester hours Construction Materials and Assemblies - at least 6 semester hours The remaining 6 semester hours must be taken in at least two of the three areas, or in studies of Building Systems Integration.

Structural Systems are defined as the basic structural elements of a building, their interaction as a support system, the forces that act on or in buildings and the principles and theory upon which an understanding of these systems is based. An acceptable sequence of study should include the theory of structures, (including statics, principles of equilibrium and stability, resolution of forces, shear and bending moments, strength and mechanics of materials, analysis of structural elements, and sizing of structural members.) and the design of structures, (including the selection and design of structural systems in wood, steel and concrete appropriate to a variety of building types and span conditions.)

Environmental Control Systems are defined as building elements that pertain to the modification of the microclimate for the purpose of human use and comfort. An acceptable sequence of study will include theory and applications in the areas of heating, air conditioning, lighting (natural and artificial), plumbing, waste and fire control systems, building core systems and acoustics. Studies will also develop an understanding of related issues such as energy efficiency and alternative energy systems and strategies, health and safety codes and requirements, and environmental quality.

Construction Materials and Assemblies are defined as the characteristics of building materials and how they are made and applied in a building project. An acceptable sequence of study will include properties and behavior of materials, performance of materials and assemblies under use, material selection and detailing, the building industry, codes and standards affecting the design and construction of buildings, construction sequences and procedures, and relative economies of material and component choices.

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KNOWLEDGE OF THE PROFESSION REQUIREMENT

Course Equivalents

At least 6 semester hours credit in Knowledge of the Profession

Knowledge of the Profession is defined as the study of the technical, business, legal and ethical environment in which the practice of architecture occurs, including the range of activities involved in a typical architectural project as it moves from inception through completion of construction; the concepts, ethics and procedures for organizing an architectural practice; the financial aspects of building, including the economics of development and the legal context and rules of professional conduct, that affect architectural practice.

Practical experience in this subject area is acceptable only if it was accumulated in fulfillment of a supervised academic program requirement that has been evaluated and appears on the transcript of student grades.

3 Performance Standards

An applicant must demonstrate that they possess the knowledge and skills defined by the standards set out below. These knowledge and skills are the minimum for meeting the demands of an internship leading to registration for practise.

The Assessment Committee will assess the performance standards on the basis of transcripts and detailed course descriptions, as described in the CACB instructions accompanying the Application Form.

The performance standards encompass two levels of accomplishment: • *Understanding*—means the assimilation and comprehension of information without necessarily being able to see its full implication.

• **Ability**—means the skill in using specific information to accomplish a task, in correctly selecting the appropriate information, and in applying it to the solution of a specific problem.

The *Assessment Committee* will review the application, including the program description and detailed course outlines to determine if the applicant has met the CACB standards as follow:

History & Human Behavior Studies

3.1 *Understanding of* the architectural canons and traditions in architecture, landscape and urban design, including the vernacular traditions, as well as the climatic, technological, socioeconomic, and other cultural factors that have shaped and sustained them.

3.2 *Understanding of* the theories and methods of inquiry that seek to clarify the relationship between human behavior and the physical environment.

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3.3 Understanding of the diverse needs, values, behavioral norms, physical ability, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity for the social roles and responsibilities of architects.

Environment Studies

3.4 *Understanding* of the principles of ecology and sustainability both in making architecture and urban design decisions that conserve natural and built resources, including culturally important buildings and sites, and in the creation of healthful buildings and communities

3.5 *Understanding* of the ethical issues regarding the ecology of the natural and built environments as a fundamental responsibility of professional stewardship of the environment.

Design & Communication Studies

3.6 *Understanding of* the fundamentals of visual perception and the principles and systems of order that inform two- and three-dimensional design, architectural composition, and urban design.

3.7 *Ability to* use appropriate representational media, including freehand drawing and computer technology, to convey essential information at each stage of the pre-design and design process.

3.8 *Ability to* make technically precise drawings and develop an outline specification for a proposed design

3.9 Ability to apply fundamental architectural principles in the design of buildings, interior spaces and sites, and to respond to natural and built site characteristics in the development of a program and the design of a project. 3.10 Ability to prepare a comprehensive program for an architectural project that accounts for client and user needs, appropriate precedents, space and equipment requirements, the relevant laws and standards, and site selection and design assessment criteria.

3.11 *Ability to* produce and document a comprehensive architectural project based on a building program and a site, and that includes the development of forms and spaces demonstrating an understanding of structural and environmental systems, building envelope systems, building assemblies and lifesafety provisions, and of the principles of sustainability and environmental stewardship.

Technical Studies

3.12 *Understanding of* principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems

3.13 *Understanding of* the basic principles and appropriate application and performance of environmental systems, including acoustical, lighting, climate modification systems and energy use.

3.14 *Understanding of* the basic principles and appropriate application and performance of plumbing, electrical, vertical transportation, communication, security, and fire protection systems

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3.15 *Understanding of* the basic building science principles and the appropriate application of building envelope materials and assemblies in the Canadian environment

3.16 Understanding of the basic principles and appropriate application and performance of various construction materials, products, components, and assemblies common to the Canadian construction industry, including their environmental impact and reuse

3.17 *Ability* to integrate appropriate technical systems into a complex building and to use appropriate representational media, including freehand drawing and computer technology, to convey essential technical elements at each stage of the design development process

Knowledge of the Profession

3.18 *Understanding of* the responsibility of the architect to seek out, understand, and resolve the needs of the client, owner and user.

3.19 *Understanding of* obtaining commissions and negotiating contracts, managing clients, selecting consultants and recommending project delivery methods and forms of service contracts.

3.20 *Understanding of* the fundamentals of building cost, life-cycle cost, and construction estimating.

3.21 *Understanding* the workings of the Canadian construction industry and the role of the architect in the construction process.

3.22 *Understanding of* the basic principles and legal aspects of practice organization, including business planning, office and personnel management, financial management, project management, risk mitigation and dispute resolution, as well as an understanding of trends that will affect practice.

3.23 Understanding of the architect's responsibility under the laws, codes, regulations and contracts common to the practice of architecture in Canada. 3.24 Understanding of the ethical issues involved in the formation of professional judgment in architectural design and practice.

3.25 *Understanding of* the role of internship in obtaining licensure and registration and the mutual rights and responsibilities of interns and employers.

END

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