



CANADIAN COLLEGE FOR THE CERTIFICATION  
OF PROFESSIONAL ERGONOMISTS

CONSEIL CANADIEN DE CERTIFICATION  
DES PRATICIENS EN ERGONOMIE

# CCCPE CERTIFICATION APPLICATION KIT

(Effective: July 2023)

## Information and Guidelines for the application for the Canadian Certified Professional Ergonomist (CCPE) and Associate Ergonomist (AE) Designations

### IMPORTANT NOTE:

Please ensure that you are using the current version of the CCCPE Certification Application Kit. The CCCPE Board may have it updated up to no later than two (2) months prior to the application deadline. While the competencies and education requirements cannot be changed without a vote by the CCPE membership, clarifications and changes to the layout of the Application may be made at any time.



## Table of Contents

APPLICATION FORM – INCLUDE A COPY WITH YOUR APPLICATION .....	5
APPLICATION CHECKLIST – INCLUDE A COPY IN EACH APPLICATION .....	7
1. GENERAL INFORMATION FOR ALL APPLICANTS.....	9
1.1 Overview .....	9
1.2 Application Process.....	10
1.2.1 Application Preparation .....	10
1.2.2 Application Submission .....	12
1.2.3 Application Review.....	12
1.3 Appeal of Decision .....	12
1.4 Requirements for Successful Applicants.....	13
1.4.1 Code of Ethics.....	13
1.4.2 Disciplinary Action.....	13
1.4.3 Continuance of Certification .....	13
1.4.4 Annual Certificate Fee.....	13
2 EDUCATION REQUIREMENTS .....	14
2.1 Associate Ergonomist (AE), 4 Years' Experience with Mentoring & 5 Years' Experience Application Categories .....	14
2.1.1 Minimum Contact Hours.....	16
2.1.2 Laboratory Work .....	16
2.1.3 Field Work .....	16
2.1.4 Explanation of Minimum Contact Hours.....	16
2.2 25 Years Experience Application Category.....	20
2.3 Holders of Other Ergonomics/human factors Designations .....	20
2.3.1 Board of Certification in Professional Ergonomics (BCPE) and Centre for Registration of European Ergonomists (CREE) .....	20
3 PROFESSIONAL EXPERIENCE REQUIREMENTS .....	21
3.1 Professional Experience Duration (PED) .....	21
3.1.1 Professional Experience Acquired During Enrolment in an Educational Program.....	22
3.1.1.1 Professional Experience Acquired After Education Requirements Met .....	22
3.1.1.2 Professional Experience Acquired Before Education Requirements Met.....	22
3.2 Professional Competence (PC).....	23
3.3 Mentored Experience (4 Years Experience Category).....	24
3.3.1 Information for the Applicant .....	24
3.3.2 Information for the Mentor .....	25



4	APPLICATION DOCUMENTATION .....	26
4.1	Application Form and Fee .....	26
4.2	Summary Letter.....	26
4.3	Curriculum Vitae .....	26
4.4	Education Documentation* .....	27
4.4.1	Proof of Education .....	27
4.4.2	Education Course Description Log .....	27
4.4.3	Education Course Allocation Log.....	29
4.5	Professional Experience Documentation.....	30
4.5.1	Professional Experience Duration (PED) .....	31
4.5.1.1	Employment History Log.....	31
4.5.1.2	Employment History Log for Academics .....	33
4.5.1.3	Teaching Course Details Log for Academics.....	33
4.5.2	Professional Competence (PC).....	34
4.5.2.1	Work Products.....	34
4.5.2.2	Work Product Summary .....	35
4.5.2.3	Mentor Letter (4 Years' Experience Application Category) .....	37
4.6	Application Checklist.....	37

## List of Tables

Table 1: SUMMARY OF DOCUMENTATION REQUIREMENTS FOR AE AND CCPE APPLICATION CATEGORIES .....	11
Table 2: EDUCATIONAL REQUIREMENTS FOR CERTIFICATION .....	15
TABLE 3: TOPICS FOR SECTION A: EDUCATION FOUNDATIONAL FOR ERGONOMICS AND/OR HUMAN FACTORS.....	18
TABLE 4. TOPICS FOR SECTION B: EDUCATION SPECIFIC TO ERGONOMICS AND/OR HUMAN FACTORS...	19
Table 5: MAXIMUM ALLOWABLE PERIODS TO OBTAIN EXPERIENCE .....	21
Table 6: PROFESSIONAL COMPETENCIES .....	23
Table 7. EDUCATION COURSE DESCRIPTION LOG WITH SAMPLE ENTRY.....	29
Table 8: EDUCATION COURSE ALLOCATION LOG WITH SAMPLE ENTRY.....	30
Table 9: EMPLOYMENT HISTORY LOG WITH SAMPLE ENTRY.....	32
Table 10: EMPLOYMENT HISTORY LOG FOR ACADEMICS WITH SAMPLE ENTRY.....	33
Table 11: TEACHING COURSE DETAILS LOG FOR ACADEMICS WITH SAMPLE ENTRY .....	34
Table 12: WORK PRODUCT SUMMARY SAMPLE .....	36



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PROFESSIONAL ERGONOMISTS

Canadian College for the Certification of Professional Ergonomists  
Conseil Canadien de Certification des Practiciens en Ergonomie

## ABBREVIATIONS:

**ACE** – Association of Canadian Ergonomists

**Eur. Erg** – European Ergonomist

**BCPE** – Board of Certification in Professional Ergonomics  
**IEA** – International Ergonomics Association

**CCCPE** – Canadian College for the Certification of Professional Ergonomists

**CCPE** – Canadian Certified Professional Ergonomist

**CREE** – Centre for Registration for European Ergonomists



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## APPLICATION FORM – INCLUDE A COPY WITH YOUR APPLICATION

Please refer to the [Application Checklist](#) to ensure that all documentation has been completed as required.

Mr. ☐ Ms. ☐ Mrs. ☐ Dr. ☐

First name \_\_\_\_\_ Surname \_\_\_\_\_

Position/Title \_\_\_\_\_

Organization \_\_\_\_\_

Preferred mailing address: ☐ Business ☐ Residence

Address \_\_\_\_\_

City \_\_\_\_\_ Province \_\_\_\_\_ Postal Code \_\_\_\_\_

Telephone \_\_\_\_\_ Email \_\_\_\_\_

I am applying under the following Application Category:

- ☐ Associate Ergonomist  
☐ 4 Years Experience (including 1 Mentored year)  
☐ 5 Years Experience

Date AE designation granted (current AEs who are applying for CCPE): \_\_\_\_\_

Date Education Requirements complete (all applicants): \_\_\_\_\_

ACE Membership No. (holders of ACE membership only): \_\_\_\_\_

I am applying to the Board of the Canadian College for the Certification of Professional Ergonomists for recognition and for the right to describe myself as:

- ☐ Associate Ergonomist (AE)  
☐ Canadian Certified Professional Ergonomist (CCPE)

I undertake, if so recognized, to adhere to the Code of Ethics and the Continuance of Certification of the College, and to pay the annual renewal fee.

I hereby declare that I have received all permissions necessary to include confidential documents with this application. I also declare that all work submitted for documentation of my accomplishments is my own or, when co-authored, that I played a substantive role in the work.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_



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Non-refundable payment must accompany the application (credit card online payment, or mail cheque payable to CCCPE) in the amount of:

AE Applicants: \$200.00 (+ applicable GST/HST for your province\*\*)

CCPE Applicants (current AE) \$400.00 (+ applicable GST/HST for your province\*\*)

CCPE Applicants: \$500.00 (+ applicable GST/HST for your province\*\*)

If you would like to pay by credit card please email [info@cccpe.ca](mailto:info@cccpe.ca) and we will send you a PayPal invoice.

\*\*Current GST/HST rates at 2020-04-01: 5% for AB, BC, MB, SK, QC, YK, NU, NWT; 13% ON; 15% NB, NL, NS, PEI

## CCCPE CONTEST

If a current AE or CCPE assisted you with the completion of your application, please indicate their name below and email to enter them into a prize draw.

First name \_\_\_\_\_ Surname \_\_\_\_\_

Email \_\_\_\_\_



## APPLICATION CHECKLIST – INCLUDE A COPY IN EACH APPLICATION

This checklist is intended to assist the applicant in meeting all requirements for application. No application will be accepted for review until it complies with all of the requirements outlined in Section 4 – Application Documentation. Please read through the checklist thoroughly and include a copy in your digital submission for both CCPE and AE applications. Only one copy of official transcripts is required for both CCPE and AE applications.

### 1A. GENERAL (All Applicants)

- ☐ Copy of the completed [Application Form](#)
- ☐ Cheque or money order payable to CCCPE for the appropriate non-refundable fee (if not paying online)
- ☐ [Summary Letter](#) (electronic)
- ☐ [Curriculum Vitae](#) (electronic)
- ☐ A copy of this completed checklist (electronic)

### 2. EDUCATION

#### 2A. AE Applicants

- ☐ Email application including a scanned copy of official transcripts to [info@cccpe.ca](mailto:info@cccpe.ca) with originals from institution to follow.
- ☐ [Education Course Description](#) Log in electronic copy
- ☐ [Education Course Allocation Log](#) in electronic copy (in Excel format).

#### 2B. 4 Years (with Mentorship) and 5 Years' Experience Applicants

- ☐ Email application including a scanned copy of original official transcripts to [info@cccpe.ca](mailto:info@cccpe.ca).
- ☐ [Education Course Description Log](#)
- ☐ [Education Course Allocation Log](#) in electronic copy (in Excel format).

#### 2C. AE Holders Applying under the 4 Years with Mentorship or 5 Years Experience Categories

- ☐ Copy of AE acceptance letter

#### 2D. Holders of BCPE certification

- ☐ Copy of CPE certificate

#### 2E. Holders of CREE certification

- ☐ Copy of Eur.Erg certificate



### 3. PROFESSIONAL EXPERIENCE (CCPE applicants only)

#### 3A. All Applicants

- ☐ [Employment History Log](#)
- ☐ [Employment History Log for Academics](#) and [Teaching Course Details Log](#) for Academics (if claiming Academic employment and/or teaching)
- ☐ [Work Product Summaries](#) for each work product
- ☐ [Work Products](#) span the time frame claimed for [Professional Experience Duration](#)
- ☐ Work Products are electronically tabbed in order to clearly demonstrate the claimed [Professional Competencies](#)
- ☐ The total number of pages submitted as Work Product is a maximum of 100 pages

#### 3B. 4 Years Experience + Mentoring Applicants

- ☐ [Mentor Letter](#) signed by both Mentor and Applicant
- ☐ Professional Experience Duration in the [Employment History Log](#) is at least 4 years (48 months) FTE obtained within the past 8 years and includes 1 year of Mentored Experience
- ☐ [Work Products](#) are electronically tabbed to clearly indicate where each specific [Professional Competency](#) is demonstrated.

#### 3C. 5 years Experience Applicants

- ☐ Professional Experience Duration in the [Employment History Log](#) is at least 5 years (60 months) FTE obtained within the past 10 years.
- ☐ [Work Products](#) are electronically tabbed to clearly indicate where each specific [Professional Competency](#) is demonstrated.
- ☐ If claiming academic Professional Experience Duration, include [Teaching Details Course Log](#).





## 1. GENERAL INFORMATION FOR ALL APPLICANTS

### 1.1 Overview

The Association of Canadian Ergonomists (ACE) describes Ergonomics/human factors as follows: Ergonomics/human factors is the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimize human well-being and overall system performance. Ergonomics/human factors promotes a holistic approach in which considerations of physical, cognitive, social, organizational, environmental and other relevant factors are taken into account.

One of the main reasons for creating the Canadian College for the Certification of Professional Ergonomists (CCCPE), the certifying body for ergonomists in Canada, was to protect the consumers of ergonomics/human factors work (e.g., employers, clients, students) from those who describe themselves as “ergonomics/human factors experts” without having appropriate qualifications. Therefore, the certification process must ensure that the applicants have:

- The knowledge and skills necessary to work in the discipline,
- Adequate familiarity and competence with the tools and methods used to apply their knowledge and skills in the field, and
- Experience with the application of the tools, and feedback on their use.

The certification process and criteria described herein are directed at those individuals who are engaged in the practice of ergonomics/human factors as their primary work. Similar to ergonomics/human factors certifications in other countries, the Canadian Certified Professional Ergonomist (CCPE) designation is intended for applicants who can demonstrate that their education addresses the entire breadth of the ergonomics/human factors discipline and that they have been devoting the majority of their work time to the application, practice and/or teaching of ergonomics/human factors.

Individuals may apply under one of the following categories. The Application Categories are based on the duration of accumulated professional experience with the exception of Associate Ergonomist, which is based on education only.

- **Associate Ergonomist (AE)**  
Based on education only. Intended to be a progression towards Canadian Certified Professional Ergonomist (CCPE) designation, not a permanent designation. Recognition as an AE is limited to a 10-year period from the date AE designation was granted, during which the applicant is



expected to apply for CCPE designation. This period can be extended only upon request to, and approval by, the Board.

- **4 Years Experience with Mentored Experience**

Based on education and 4 years experience, including one year of [Mentored Experience](#). Where applicants have an appropriate [Mentor](#), 4 years experience is considered the minimum number of experience years needed to meet the competency requirements for CCPE designation.

- **5 Years Experience**

Based on education and 5 years experience, which is considered the minimum number of experience years to meet the competency requirements for CCPE designation.

- **25 Years Experience**

Based on education and 25 years experience.

CCCPE recognizes the long term contributions and accomplishments of our most experienced ergonomics/human factors practitioners and provides a streamlined application process.

*Note: This category will cease to exist January 1, 2021*

The onus is on the applicant to obtain both the education and professional experience required for the chosen category. Furthermore, the onus is on the applicant to provide the CCCPE Board with the necessary evidence of such education and experience to enable a fair and proper assessment to be made.

## 1.2 Application Process

Applications are reviewed in two cycles each year. Applications received at the ACE National Office by March 1 of a given year will be processed by September 1 of the same year. Applications received at the ACE National Office by September 1 will be processed by March 1 of the following year. The ACE National Office and the CCCPE Board will not respond to inquiries with respect to the status of their application within the processing period. Applications received between application deadline dates (March 1 and September 1 of each year) will be held until the next deadline date.

### 1.2.1 Application Preparation

The documentation required to prepare a complete application is outlined in [Table 1](#) for Associate Ergonomist and for each application category of CCPE. Please refer to the detailed description of Education Requirements ([Section 2](#)), Professional Experience Requirements ([Section 3](#)), and Application Documentation ([Section 4](#)) to ensure that these requirements are understood and properly documented in the application.

Check the prepared materials against the [Application Checklist](#) to ensure it is complete.



**TABLE 1: SUMMARY OF DOCUMENTATION REQUIREMENTS FOR AE AND CCPE APPLICATION CATEGORIES**

DOCUMENTATION REQUIREMENTS	APPLICATION CATEGORY			
	Associate Ergonomist <sup>1</sup>	CCPE (Category Based on Professional Experience Duration)		
		4 Years with 1 mentored <sup>2</sup>	5 Years <sup>2</sup>	25 Years
GENERAL				
<a href="#">Application Form</a> and Fee	X	X	X	X
<a href="#">Summary Letter</a>	X	X	X	X
<a href="#">Curriculum Vitae</a>	X	X	X	X
EDUCATION <sup>1</sup>				
<a href="#">Proof of Education:</a> <sup>3</sup>	Original Official Transcript	Original Official Transcript	Original Official Transcript	Copy of Degree or Transcript
<a href="#">Education Course Description Log</a> <sup>3</sup>	X	X	X	
<a href="#">Education Course Allocation Log</a> <sup>3</sup>	X	X	X	
PROFESSIONAL EXPERIENCE				
<a href="#">Employment History Log</a> <sup>4</sup>		X	X	X
<a href="#">Work Products with Tabbed Competencies</a>		X	X	X
<a href="#">Work Product Summaries</a>		X	X	X
<a href="#">Mentor Letter</a>		X		

Notes:

1. **AE Application** can be emailed in its entirety, except for original transcripts from institution which must be mailed/emailed.
2. **AE Holder applying for CCPE** within 10 years of being granted AE is not required to resubmit Proof of Education or Education Logs. They are, however, required to submit a copy of their AE acceptance letter.
3. **BCPE Holder:** Proof of Education and Education Logs are not required if a copy of the BCPE Certificate is provided.
4. **Academics** claiming Professional Experience for an academic position must document their experience using the [Employment History Log for Academics](#), and the [Teaching Course Details Log for Academics](#).



### 1.2.2 Application Submission

- Submit the completed application and applicable fee. When an AE applies for full certification as a CCPE within the AE 10-year recognition period, the certification fee to be paid will be reduced by amount of the AE fee. If the 10-year period has expired, a full CCPE application must be made.
- For AE and CCPE Applications, the applicant must email their applications to [info@cccpe.ca](mailto:info@cccpe.ca), in addition to requesting that their original transcripts be sent to CCCPE by mail or email.

### 1.2.3 Application Review

- When an application is received, it is reviewed against the [Application Checklist](#) to ensure it is complete. If the required components of the application are not complete, the applicant will be notified of the missing portions and a deadline for submission will be provided.
- Complete applications will be reviewed by two Board members fluent in the language of the application (English or French).
- The applicant's educational background is assessed against the criteria in [Table 2](#). The AE designation will be granted if the education criteria are met and an effective date of completion of education is determined for the purpose of measuring the [Professional Experience Duration](#) (PED) component. Where the designation is not granted, the applicant is informed of this finding and details are provided regarding criteria that were not met.
- For applicants seeking the CCPE designation, the documented experience is then evaluated against the PED and Professional Competence (PC) criteria. The CCPE designation will be granted if the PED and PC criteria are met. Where the designation is not granted, the applicant is informed and provided details regarding gaps between his or her professional experience and the relevant criteria. If the initial educational background review of the application (where applicable) reveals gaps in education, the review will be terminated, and the PED and PC will not be reviewed.
- If the reviewers do not believe they have sufficient evidence to make a decision, the applicant may be contacted for further information and the review of the application will be delayed.

## 1.3 Appeal of Decision

An appeal process is available to any applicants who feel they have unjustly been denied designation as an AE or CCPE. The appeal document is available on the CCCPE [website](#) or by contacting the CCCPE Secretariat.



## **1.4 Requirements for Successful Applicants**

### **1.4.1 Code of Ethics**

All AEs and CCPEs, by virtue of their application for such designation, agree to be bound by the CCCPE Code of Ethics found on the CCCPE [website](#).

### **1.4.2 Disciplinary Action**

Where a violation of the Code of Ethics has been alleged, investigated, and proven, the Board may initiate disciplinary action against the individual in question. The specifics of such action will be decided through the disciplinary process but could include temporary suspension or permanent revocation of the designation.

### **1.4.3 Continuance of Certification**

All CCPEs must maintain competency and keep up to date with the latest knowledge and methods employed in the ergonomics/human factors discipline. The Continuance of Certification process is found on the CCCPE [website](#).

### **1.4.4 Annual Certificate Fee**

Once designated as an AE or as a CCPE, an annual fee must be paid. The annual fee for the certificate includes the cost of ACE membership for the “Member” category. AE certificants must maintain their annual fees in order to apply for CCPE.



## 2 EDUCATION REQUIREMENTS

Education Requirements depend on the selected [Application Category](#).

### 2.1 Associate Ergonomist (AE), 4 Years' Experience with Mentoring & 5 Years' Experience Application Categories

Applicants must have at least a Bachelor's degree in ergonomics/human factors or an equivalent program (e.g. psychology, kinesiology, industrial or systems design engineering). The applicant's education will be assessed against the [Table 2](#) criteria, through an evaluation of documentation.

The majority of education requirements are to be met through credits obtained in courses provided by an accredited university or college. However, we recognize that not all universities offer the full range of courses required to meet CCCPE education requirements and that workshops, seminars, and non-university accredited courses can fulfill a need in ergonomics/human factors education, especially in relation to practical techniques. The CCCPE will accept up to 10% of hours required within each Category (Table 2) as having been met through non-accredited courses under the following conditions:

- The course must be taught by a CCPE, or an individual certified through an International Ergonomics Association (IEA) accredited certification body, or by an ACE Fellow, or by an individual who is on faculty at a university or college whether full-time, part-time or adjunct.
- The course is at least 4 hours in length.
- The applicant provides the required Proof of Education.

Documentation required to demonstrate education is as follows:

- [Proof of Education\\*](#) (4.4.1)
- [Education Course Description Log](#) (4.4.2)
- [Education Course Allocation Log](#) (4.4.3)



**TABLE 2: EDUCATIONAL REQUIREMENTS FOR CERTIFICATION**

Categories	Knowledge Areas	Minimum Contact Hours
Section A: <b>Foundational</b> for Ergonomics/ Human Factors	A1. Design Concepts (other)	20
	A2. Evaluation	75
	A3. Other	5
	A4. Physical Demands	20
	A5. Human Performance	20
	A4 + A5 = minimum of 120 hrs	
	<b>Minimum Total of Section A</b>	<b>300</b>
Section B: <b>Specific</b> to Ergonomics/ Human Factors	B1. General	5
	B2. Design Concepts in Ergo/HF	10
	B3. Cognitive Ergo/HF	10
	B4. Physical Ergo/HF	10
	B5. Macro Ergo/HF	10
	<b>Minimum Total of Section B</b>	<b>100</b>
<b>Minimum Total of Sections A + B</b>		<b>500</b>
Section C: Laboratory Work	<b>Specific</b> to Ergo/HF	20
	<b>Foundational</b> or <b>Specific</b> to Ergo/HF	80
	<b>Minimum Total of Section C</b>	100
Section D: Field Work	<b>Specific</b> to Ergo/HF	30
	<b>Minimum Total of Section D</b>	30
<b>Minimum Total of Sections C + D</b>		<b>150</b>
<b>Overall Minimum Total of Sections A, B, C &amp; D</b>		<b>800</b>

**Foundational** - background content relevant to the practice of Ergonomics/Human Factors (Ergo/HF)

**Specific** - must be taught with specific reference to, and examples from, the practice of Ergo/HF



### 2.1.1 Minimum Contact Hours

Contact Hours refers to official time spent with an instructor in a classroom, laboratory, seminar, project or directed study. This does not include tutorial time. Tutorials are opportunities for students to discuss and to study content introduced in lecture or laboratory courses; however, tutorials are often facilitated by Tutorial Assistants (TA) rather than course instructors. Courses with more than 45 total lecture contact hours will need justification.

For independent study courses, applicants may claim hours up to the total hours of a standard class-based course (~35-45 hours). For thesis work, applicants may claim contact hours spent in meetings and consultation with their supervisor.

In the case of asynchronous online courses, applicants may claim hours up to the total hours of an equivalent standard class-based course.

### 2.1.2 Laboratory Work

Laboratory work applies the classroom theory and methods and takes place in a laboratory or other controlled environment under direct supervision of the course instructor. Only the hours spent in the lab under the supervision of the instructor count towards Contact Hours. Hours spent analyzing data and report writing do not count towards Laboratory Work Contact Hours. A minimum of 100 hours in the lab are required, with at least 20 being **Specific** to, the practice of ergonomics/human factors and the remaining 80 hours being **Foundational** or **Specific**. This can include time in a laboratory for an undergraduate or graduate research thesis.

### 2.1.3 Field Work

Field Work puts ergonomics/human factors methodology into practice in the workplace. Contact Hours accumulated include time spent in the organization or in a follow-up session with the supervisor. Hours spent analyzing data and report writing count towards Field Work Contact Hours. This includes data collection in the Field for an undergraduate or graduate research thesis.

In the case where the field work requirement is completed following the completion of the educational degree, the field work must be Mentored or under the supervision of a CCPE, or an individual certified through an IEA accredited certification body, or by an ACE Fellow, or by an individual who is on faculty at a university or college whether full-time, part-time or adjunct. Field Work involving supervision by another professional (not identified above) within the workplace may be considered on a case-by-case basis with explanation by the applicant. Contact hours must be **Specific** to Ergo/HF.

Please indicate who supervised the Field work and their credentials.

### 2.1.4 Explanation of Minimum Contact Hours

- Knowledge Areas are defined for the **Foundational** and **Specific** lecture content





- The proposed requirements include a minimum number of lecture hours for each Knowledge Area category in Sections A & B (e.g. minimum of 75 hrs in Knowledge Area A2. Evaluation)
  - note: While the minimums for Sections A4 & A5 are 20 & 20 hrs, respectively, their combined total must be at least 120 hours (e.g. 48 hrs in A4 + 72 hrs in A5 = 120 hrs).
- Each section also has a minimum total number of hours (minimum of 300 hrs in Section A), 100 hrs in Section B, 100 hrs in Section C & 30 hrs in Section D)
- While the minimums for Sections A & B are 300 & 100 hrs, respectively, their combined total must be at least 500 hrs (e.g. 305 hrs in Section A + 195 hrs in Section B = 500 hrs).
- Lab Work must include mainly material **Foundational** for Ergo/HF (minimum of 80 hrs) and at least 20 hrs **Specific** to Ergo/HF.
- Field Work must include at least 30 hrs **Specific** to Ergo/HF
- While the minimums for Sections C & D are 100 & 30 hrs, respectively, their combined total must be at least 150 hrs (e.g. 115 hrs in Section C + 35 hrs in Section D = 150 hrs).
- The overall total hours must combine to a minimum of 800 hrs.
  - while the minimums for Sections A+B and Sections C+D are 500 & 150 hrs, respectively, their combined total must be at least 800 hrs (e.g. 510 hrs in Section A+B + 290 hrs in Sections C+D = 800 hrs).
- The following tables show the Topics in each Knowledge Area for the proposed requirements
- There is no set allocation of hours for each topic (e.g. product design), just a required minimum total within the Knowledge Area.

**Note: Topics within each Knowledge Area are shown on the next page**



**TABLE 3: TOPICS FOR SECTION A: EDUCATION FOUNDATIONAL FOR ERGONOMICS AND/OR HUMAN FACTORS**

Knowledge Area	Topics	Knowledge Area	Topics
<b>A1</b>  <b>Design Concepts</b>  <b>(not specific to Ergo/HF)</b>	anthropometry applied systems engineering design for manufacturing design specifications discrete event simulation inclusive design instructional design process design product design product design cycle speech interfaces systems theory & design training systems universal design work schedules	<b>A3</b>  <b>Other Topics</b>	corporate standards economics legislation societal norms
		<b>A4</b>  <b>Physical Demands</b>	biomechanics & physics cardio respiratory-physiology epidemiology functional anatomy human development localized muscle fatigue motor control muscle physiology occupational safety psychophysics whole body fatigue
<b>A2</b>  <b>Evaluation</b>	cost-benefit analysis error analysis experimental design FMEA force & torque measurement functional capacity analysis interview methods population variability posture assessment process evaluation product evaluation questionnaire methods reliability and validity research design principles research methods statistics: descriptive statistics: inferential survey methods systems analysis systems evaluation task analysis	<b>A5</b>  <b>Human Performance</b>	acoustics/noise climate cognitive psychology decision making displays environmental ergonomics fatigue effects on errors fatigue effects on quality human motor control information processing memory Methods-Time Measurement sensation & perception tactile

*\*Note: Some courses may not fit any of the above categories, e.g. general biology, biochemistry, and chemistry, and should not be claimed unless justification can be provided.*



**TABLE 4. TOPICS FOR SECTION B: EDUCATION SPECIFIC TO ERGONOMICS AND/OR HUMAN FACTORS**

Knowledge Area	Topics
<b>B1</b>  <b>General</b>	ethics and codes of practice history of ergonomics, human factors and/or macro Ergo/HF
<b>B2</b>  <b>Design Concepts specific to Ergo/HF</b>	designing for individuals designing for populations human-system/machine integration interface design participatory design processes prototyping and evaluation, use/user-centered design work simulation
<b>B3</b>  <b>Cognitive Ergo/HF</b>	cognitive demands of work cognitive work/task analysis controls & visual displays HF tools (e.g. HFACS, HFIT) human error analysis human factors (HF) checklists human-computer systems input-output devices mental workload & assessment usability engineering usability testing user experience assessment

Knowledge Area	Topics
<b>B4</b>  <b>Physical Ergo/HF</b>	biomechanics software (e.g. 3DSSPP) ergonomics checklists ergonomics tools (e.g. Strain Index) hand-arm vibration occupational biomechanics occupational hygiene office ergonomics physical demands descriptions physiology equations (e.g. Garg) psychophysical data (e.g. Snook) physical demands analysis rest allowance (e.g. Rohmert) safety/ergonomic programs whole body vibration work physiology workplace injuries workplace standards workstation design
<b>B5</b>  <b>Macro Ergo/HF</b>	CIMOP/HITOP for ME Industrial relations macroergonomics (ME) concepts macroergonomics checklists ME Analysis of Design (MEAD) ME Analysis of Structure (MAS) organizational/ system design psychosocial considerations/factors sociotechnical systems approach TOP Modeler for ME work organization/ work systems



## 2.2 25 Years Experience Application Category

The education requirement for certification under this category is a university degree.

Documentation required to demonstrate education are as follows:

- [Proof of Education](#) (4.4.1)
- No education logs are required

## 2.3 Holders of Other Ergonomics/human factors Designations

### 2.3.1 Board of Certification in Professional Ergonomics (BCPE) and Centre for Registration of European Ergonomists (CREE)

The BCPE administers the Certified Professional Ergonomist (CPE) and Certified Human Factors Professional (CHFP) designations in the United States. CPE and CHFP holders are considered to have met the Education Requirements upon submission of evidence of BCPE certification.

The Centre for Registration of European Ergonomists (CREE) administers the European Ergonomist (Eur.Erg) designation in Europe. Eur.Erg. holders are considered to have met the Education Requirements upon submission of evidence of CREE certification.

Other IEA Federated Society related certifications may also be eligible for waiver of the Education Requirements and should contact the CCCPE via [info@cccpe.ca](mailto:info@cccpe.ca) to inquire about eligibility.



### 3 PROFESSIONAL EXPERIENCE REQUIREMENTS

Professional experience will be evaluated on the basis of Professional Experience Duration (PED) and Professional Competence (PC).

#### 3.1 Professional Experience Duration (PED)

The certification process is directed towards those who practice ergonomics/human factors as their primary work.

PED will be assessed as full-time equivalent (FTE) experience obtained during the maximum allowable period of consecutive years' experience as shown in [Table 5](#). At least 50% of the applicant's professional activities must have been in the direct application of ergonomics/human factors for a period to count towards FTE experience. Professional experience acquired during enrolment in an educational program may count towards PED ([3.1.1.](#)).

Due to the applied nature of the ergonomics/human factors discipline, the teaching of an ergonomics/human factors course at a recognized educational institution (i.e., university or college) shall be counted as "direct application of ergonomics/human factors" for the purpose of calculating the percentage of qualifying work. An "ergonomics/human factors course" is a full term course including evaluation, covering one or more Knowledge Areas in [Table 2](#) and is taught with reference to and examples from the practice of ergonomics/human factors.

**TABLE 5: MAXIMUM ALLOWABLE PERIODS TO OBTAIN EXPERIENCE**

Application Category	Maximum Allowable Period (years)
4 Years Experience Incl. 1 Mentored Year	8
5 Years Experience	10

Documentation required to demonstrate PED may include:

- [Summary Letter](#) (4.2)
- [CV](#) (4.3)
- [Employment History Log](#) (4.5.1.1)
- [Employment History Log for Academics](#) (4.5.1.2)
- [Teaching Course Details Log for Academics](#) (4.5.1.3)



### **3.1.1 Professional Experience Acquired During Enrolment in an Educational Program**

The Board of the CCCPE encourages acquisition of ergonomics/human factors experience during the formal education program of ergonomists.

Professional Experience can be gained while enrolled in an educational program, however the criteria for counting towards FTE depends on when the experience was accumulated – either after the Education Requirements have been met or before the Education Requirements have been met.

#### **3.1.1.1 Professional Experience Acquired After Education Requirements Met**

Applicants who have met the Education Requirements to the satisfaction of the CCCPE, but who are pursuing further education may be eligible to include some work experience towards PED. For example, applicants who are pursuing graduate studies and have been practicing ergonomics/human factors between degrees and whose minimum ergonomics/human factors education is assessed by the CCCPE to have been satisfactorily completed during their first degree.

Experience accumulated after the completion of Education Requirements may be counted as follows:

- Applied ergonomics/human factors experience work that is unrelated to the degree may receive 100% FTE towards PED provided that it has not already been credited towards the educational requirements.
- Ergonomics/human factors work that is done for course credit, including thesis work, may receive up to 50% FTE towards PED to a maximum of 18 months for time spent on this type of work provided the general conditions above are met.

#### **3.1.1.2 Professional Experience Acquired Before Education Requirements Met**

Applicants who have not met the Education Requirements to the satisfaction of the CCCPE, but who are in the midst of completing education may be eligible to include some work experience towards PED.

Experience accumulated during the completion of Education Requirements may be counted as follows:

- The CCCPE may accept up to 50% FTE (to a maximum of 2 years PED) of the total duration of ergonomics/human factors experience, including thesis work not claimed toward educational requirements, acquired during the time between having completed the first degree, and completion of subsequent educational pursuits.
- The CCCPE may accept up to 50% FTE (to a maximum of 6 months PED) of the total duration of the ergonomics/human factors experience acquired during the pursuit of a first degree (e.g. relevant co-op work terms not used to achieve field work requirements).



- 30 hours of this experience (e.g. relevant co-op work terms, paid internships, summer employment) (approximately 8 weeks) may be used to meet the Education Requirement of 'Field Work' ([Table 2](#)) but the time then cannot also be used for PED.

### 3.2 Professional Competence (PC)

Seventeen competencies have been identified that encompass the multidisciplinary nature of ergonomics/human factors. [Table 6](#) lists the professional competencies that are required for certification. A minimum of 12 competencies must be demonstrated. Six of these competencies are mandatory (1, 2, 6, 9, 13 and 15).

**TABLE 6: PROFESSIONAL COMPETENCIES**

**Preliminary Project Definition – must demonstrate competencies 1, 2 and two others of the five.**

1. Initially assessing and evaluating an ergonomics/human factors problem or proposed ergonomics/human factors project OR Designing and conducting an ergonomics/human factors study or investigation.
2. Critically reviewing, synthesizing and utilizing existing research-based knowledge to inform the evaluation, study design, interventions or other solutions.
3. Establishing a consultant relationship with other professions involved in a design project.
4. Securing the collaboration of interested parties (executives, managers, supervisors, operators, union representatives, customers, clients, other users).
5. Recruiting and securing the collaboration of persons whose activities form the major focus of interest in the project.

**Systematic Analysis – must demonstrate competencies 6, 9 and one other of the four.**

6. Conducting a systematic analysis: of the relevant activities in the work setting, or of products, or of services.
7. Collating, analyzing and interpreting data and statistics derived from data.
8. Verifying appropriateness and correctness of problem definition and assessment or intervention.
9. Preparing succinct ergonomics/human factors technical report that includes conclusions and recommendations supported by analysis of data that are presented in an appropriate manner relevant to the project or problem, and relevant scientific literature.

**Participation in the Design Process - must demonstrate competency 13 and two others of the five.**

10. Identifying design specifications from the systematic analysis to meet the project objective.
11. Preparing design specification report for use by industrial designers, engineers, computing scientists, systems analysts, architects or other professionals.
12. Working in a design team or as a consultant to supervise the application of solutions in the workplace.
13. Evaluating effectiveness of design of tasks, jobs, products, tools, equipment, systems, organizations, services, facilities or environments against design objectives (e.g. usability, cost, risk reduction, safety, productivity etc.) Must clearly outline the design objectives and the method of evaluating the design to meet the objectives.



14. Using economic considerations in ergonomics/human factors interventions.

**Other Competencies – must demonstrate competency 15 and one other of the three.**

15. Demonstrating integration of, or ability to integrate, biophysical, perceptual, cognitive and psychosocial considerations in ergonomic evaluation of existing design or recommendations for design changes in products, services or work processes. Many disciplines underpin effective ergonomics/human factors design. They include, but are not limited to physiology, perceptual and cognitive psychology, engineering, biomechanics, organizational behavior, sociology, social psychology, economics. Proper ergonomics/human factors design considers physical, perceptual, cognitive, behavioral and social abilities, limitations and needs of all people in the system.
16. Preparing succinct and comprehensible materials and verbal presentations that communicate the application of ergonomics/human factors information and methods to a range of audiences (e.g. workers, employers, other professionals).
17. Demonstrating experience and understanding of project management including timeliness and critical path, allocation of resources and progress monitoring.

Documentation required to demonstrate PC may include:

- [Summary Letter](#) (4.2)
- [Work Products](#) (4.5.2.1)
- [Work Product Summary](#) (4.5.2.2)
- [Mentor Letter](#) (4.5.2.3)

### 3.3 Mentored Experience (4 Years Experience Category)

Mentored Experience is one year of professional experience which has been overseen by a qualified individual i.e. a Mentor.

For the purposes of the 4 Years Experience Application Category, a Mentor must be a CCPE, a Member of ACE or another IEA Federated Society or an individual certified through an IEA accredited certification body during the time the mentoring takes place. The Mentor will, at a minimum, inspect the work of the applicant from time to time and provide feedback and guidance as required. The Mentor does not have to accept responsibility for the applicant's work. It is not necessary for the Mentor to have been the applicant's direct supervisor during the Mentored Experience period. If the Mentor is not the applicant's supervisor, the applicant needs to ensure that there is contact between the Mentor and their supervisor with respect to applicant's general performance on the job. The Mentor does not have to work for the same company as the applicant.

#### 3.3.1 Information for the Applicant

The Mentored Experience must occur after Education Requirements have been fully met to the satisfaction of the CCCPE Board. This means that those intending to apply in this category should apply





for AE to have their educational qualifications assessed by the Board. It is not mandatory to do this but risky not to do it.

Applied field work carried out as part of an educational program may be counted towards up to 3 months of Mentored Experience if the Educational Requirements have been fully met at the time the experience was accumulated and provided that the field work has not already been credited towards the Educational Requirements.

Short periods of professional experience gained under a series of Mentors can be added together towards the requirements for one-year FTE of Mentored Experience. Testimonial from all Mentors will be required. The one year of Mentored Experience does not have to precede the remaining professional experience required for certification.

In order to be credited with Mentored Experience, the applicant must have demonstrated at least the 6 mandatory competencies in [Table 6](#). The Mentor(s) must provide a [Mentor Letter](#) that documents the proficiency of the applicant's work as related to the competencies in [Table 6](#).

Applicant responsibilities:

- take notes during each communication with the Mentor and email them to the Mentor
- use notes to set agenda for next communication
- provide work products to the Mentor for review

Information for Mentors is found in [3.3.2](#) and on the [CCCPE website](#).

### **3.3.2 Information for the Mentor**

The Mentor must be a CCPE, a Member of ACE or another IEA Federated Society or an individual certified through an IEA accredited certification body during the time the mentoring takes place. The Mentor does not have to accept responsibility for the applicant's work.

Mentor responsibilities:

- communicate with applicant at least once a month to review work progress and provide guidance; phone conferences and email messages are legitimate forms of communication, but periodic face-to-face meetings are also important.
- review [Table 6](#) with the applicant during the first meeting to identify objectives that she/he would like to get out of the mentoring process; review initial objectives periodically to see if they need to be changed.
- use meeting notes prepared by applicant to work out a plan for progression and determine if progress is being made
- review work products provided by the applicant and provide feedback and guidance as required



Once the mentored period is complete, the Mentor is required to provide a Mentor Letter which covers duration and form of relationship, dates of meetings and progress reports. The Mentor Letter should include a description of how and when the applicant demonstrated the professional competencies in [Table 6](#), and at what level (adequate/satisfactory, moderate level, high level). The Mentor Letter should be signed by the Mentor, and countersigned by the applicant and returned with her/his application.

## 4 APPLICATION DOCUMENTATION

Documentation is required to provide evidence of Education and Professional Experience. AE applications can be submitted in electronic format in their entirety except as outlined below.

The following sections contain descriptions of the required documentation, relevant forms and examples to assist the applicant.

To ensure that all required documentation has been completed, refer to the [Application Checklist](#).

### 4.1 Application Form and Fee

All applicants must include the [Application Form](#) and the applicable non-refundable fee.

### 4.2 Summary Letter

All applicants must include the Summary Letter, and it must include the following:

- [Application Category](#)
- An overview of how the applicant satisfies the Application Category requirements
- The date on which Educational Requirements were completed (Whether any Professional Experience (if applicable) is being claimed prior to the date of completing the Education Requirements)

### 4.3 Curriculum Vitae

All applicants must submit a CV showing education, employment position and primary duties, peer reviewed publications, non-peer reviewed publications and conference papers where applicable.



## 4.4 Education Documentation\*

[Proof of Education](#) (4.4.1) is required for all applicants.

The [Education Course Description Log](#) and [Education Course Allocation Log](#) are required for applicants in the following Application Categories:

- AE
- Years Experience (with Mentoring)
- Years Experience

The Board reserves the right to ask for more detail, should that be necessary and to deny certification if education does not meet requirements.

\* Applicants applying under the 4 Years or 5 Years Experience categories who have already been granted the AE designation do not need to resubmit their Proof of Education, Education Course Description Log or Education Course Allocation Log. They must, however, include a copy of their acceptance letter.

### 4.4.1 Proof of Education

An original official transcript from the educational institution must be submitted by mail to the CCCPE office and a scanned copy must be emailed, by the following applicants:

- AE (mail the original copy and provide an electronic copy with the emailed application)
- 4 Years' Experience (with Mentoring)
- 5 Years' Experience

BCPE holders must submit a copy of their certificate electronically.

Any applicant claiming non-accredited coursework must provide the following:

- evidence of completion e.g. copy of certificate, letter
- documentation of the course content and duration (minimum course length is 4 hours)
- statement of instructor's qualification (course must be taught by a CCPE, BCPE or Centre for Registration of European Ergonomists (CREE) certified individual, or by an ACE Fellow, or by an individual who is on faculty at a university or college whether full-time, part-time or adjunct)

### 4.4.2 Education Course Description Log

The Education Course Description Log ([Table 7](#)) is intended to provide the reviewers with detailed descriptions and Total Course Contact Hours for each course claimed in the Education Course Allocation Log ([Table 8](#)).



For Knowledge Areas A courses must be Foundational to ergonomics/human factors.

For Knowledge Areas B, C and D course hours **must be taught with reference to and with examples from the practice of ergonomics/human factors**. The course description provided must clearly indicate reference to ergonomics/human factors, or the applicant must provide an additional description (e.g. course outline, list of topics, examples of case studies, etc.) to clearly demonstrate direct links in the course material to Knowledge Areas B, C and D. If it is determined that the course descriptions or summaries provided do not appear relevant, these hours will be removed and if deemed relevant they may be reassigned to other Knowledge Areas by reviewers.

For any independent study courses or research proposals, include a full description of your topic to allow justification of the allocated hours.

The description of Field Work must specify what was done (e.g., testing or data collection in an industrial environment, job analysis, workplace assessment) as well as the name and credentials of the supervisor.



**TABLE 7. EDUCATION COURSE DESCRIPTION LOG WITH SAMPLE ENTRY**

Knowledge Areas	Course Name	Total Course Contact Hours	Description	University/ College	Dept/ Program	Teacher	Course Text
A1, B2, B3, B4, B5	Human Factors in Industrial Design	45 h	The theme of this course is the role of human factors in the design process. The objective of the course is to explain how human factors/ ergonomics knowledge is incorporated into the design process in order to improve safety, comfort, usability and efficiency within the working environment. Case studies will be used to illustrate the role of human factors/ ergonomics in design. Course assignments will focus on the solution of practical design problems. Topics covered include: Introduction to the design process; Product design; Design of information displays; Design of manual materials handling; Workstation design; Design of the working environment; Organization of the workplace.	Simon Fraser	Kin	Sheldon Ramirez Foxter	Saunders & McCormick

#### 4.4.3 Education Course Allocation Log

The Education Course Allocation Log ([Table 8](#)) is intended to demonstrate allocation of completed coursework to the required Knowledge Areas. The electronic template of this document is available on the CCCPE website <http://www.cccpe.ca>. The applicant is required to use the template to summarize their completed coursework. After completing the log electronically, the applicant must email their education log to [info@cccpe.ca](mailto:info@cccpe.ca).



Contact Hours refers to official time spent with an instructor in a classroom, laboratory, seminar, project or directed study. This does not include Tutorial time.

The total course contact hours claimed must be equal to or less than the total course contact hours. For example, 3 hours per week for a 1-term, 12-week course, counts as 36 hours total course contact hours. The total course contact hours claimed must be less than or equal to 45 hours per course, or justification must be provided for courses with more than 45 hours claimed.

The applicant must ensure that the Knowledge Area allocated for any given course is reasonably represented in the course name or course description within the Education Course Description Log. Contact Hours allocated to a Knowledge Area that does not appear to be relevant for that course will not be accepted by the reviewers. For example, a language course claimed as B3 Cognitive Ergo/HF, or an introductory anatomy course claimed as A1 Design Concepts (other).

In Category D, Field Work must involve applications **Specific** to ergonomics/human factors. The applicant must separate Field Work allocated under Education Requirements from Field Work claimed under PED. The same Field Work time may be applied to one of Education Requirements or PED but not to both.

**TABLE 8: EDUCATION COURSE ALLOCATION LOG WITH SAMPLE ENTRY**

Sections	Section A: Foundational for Ergonomics/Human Factors					Section B: Specific to Ergonomics/Human Factors					Section C: Laboratory Work		Section D: Field Work	Totals	
	A1 Design Concept s (other)	A2 Evalu- ation	A3 Other Topics	A4 Physical Demands	A5 Human Perform- ance	B1 General	B2 Design Concept s: Ergo/HF	B3 Cognitiv e Ergo/HF	B4 Physical Ergo/HF	B5 Macro Ergo/HF	Specific to Ergo/HF	Foundational or Specific to Ergo/HF	Specific to Ergo/HF	Class Total A + B  (values >45 are flagged)	Course Total A + B + C + D
Course Number and Name															
Example: KIN123 - Introduction to Biomechanics	0	9	10	15	12	0	0	0	0	0	20	0	0	46.0	66.0
Example: KIN456 - Advanced Physical Ergonomics (note, replace examples with your data)	2	0	0	2	2	4	3	1	18	2	2	8	20	34.0	64.0
Totals	A: Foundational for Ergonomics/Human Factors					B: Specific to Ergonomics/Human Factors					C: Laboratory Work		D: Field Work		
	Design (other)	Evalu- ation	Other Topics	Physical Demands	Perform- ance	General	Design Concepts	Cognitive Ergo/HF	Physical Ergo/HF	Macro Ergo/HF	Specific to Ergo/HF	Foundational or Specific	Specific to Ergo/HF		
Total contact hours per column	2.0	9.0	10.0	17.0	14.0	4.0	3.0	1.0	18.0	2.0	22.0	8.0	20.0		
Minimum contact hours per column	20	75	5	20	20	5	10	10	10	10	20	80	30		
Total contact hours for A4 + A5					31.0										
Minimum contact hours for A4 + A5					Min A4 + A5 = 120										
Total contact hours per Section	52.0					28.0					30.0				
Minimum contact hours per Section	Minimum for Section A = 300					Minimum for Section B = 100					Minimum for C = 100				
Total contact hours across Sections	80										50.0				
Minimum contact hours across Sections	Minimum for Sections A + B = 500										Minimum for Sections C + D = 150				
Grand total contact hours	130.0														
Minimum grand total of contact hours	Minimum grand total for Sections A + B + C + D = 800														
Colour Code	Total Sufficient					Total Too Low					Total Flagged				

Colour Code: Total Sufficient

Total Too Low

Total Flagged

## 4.5 Professional Experience Documentation

Professional Experience documentation is mandatory for all CCPE applicants.



#### 4.5.1 Professional Experience Duration (PED)

##### 4.5.1.1 Employment History Log

All CCPE applicants must fill in an Employment History Log ([Table 9](#)). This log must show the percent time in the direct application of ergonomics/human factors for each employer and the resulting FTE to be considered towards PED. Any professional experience being claimed must be identified in the appropriate table (Table 9A, 9B or 9C) depending upon when the experience was gained, relative to when the educational requirements were fully met for the CCPE or AE application.

Anyone claiming professional experience related to work in academia must complete the Employment History Log for Academics ([Table 10](#)).

Up to 3 months of Field Work may be applied to the PED requirement but the same 3 months cannot be allocated towards the Education Requirements.

At least 50% of employment time must be spent in direct application of ergonomics/human factors for any one period to be counted towards PED requirements. For employment during the last five years, please provide the name of the Supervisor. The total of the Full Time Equivalent (FTE) column must meet the PED requirements for the Application Category.



**TABLE 9: EMPLOYMENT HISTORY LOG WITH SAMPLE ENTRY**

**TABLE 9A: EMPLOYMENT HISTORY LOG FOR EMPLOYMENT COMPLETED BEFORE COMPLETING EDUCATIONAL REQUIREMENTS (PER 3.1.1.2) AND HAVE COMPLETED FIRST DEGREE**

EMPLOYER	POSITION	SUPERVISOR	DATE From	DATE To	DURATION Months	% of job Ergo related	Multiply by 50%	FTE
Ergosomething (Toronto)	Associate Ergonomist	Jean Marinaro	01/06	06/07	18	50	9 X 0.50	4.5
<b>TOTAL</b>								4.5
<b>TOTAL ALLOWABLE (max. allowable 24 months)</b>								<b>4.5</b>

(Please ensure work products include example from this time period)

**TABLE 9B: EMPLOYMENT HISTORY LOG FOR EMPLOYMENT COMPLETED BEFORE COMPLETING EDUCATIONAL REQUIREMENTS (PER 3.1.1.2) AND HAVE NOT COMPLETED FIRST DEGREE**

EMPLOYER	POSITION	SUPERVISOR	DATE From	DATE To	DURATION Months	% of job Ergo related	Multiply by 50%	FTE
XYZ Co	Co-op ergo student	Jean Marinaro	01/06	06/07	18	100	18X0.50	9
ABC Co 2	Co-op ergo student	John Black	02/08	06/08	18	100	18X0.50	9
<b>TOTAL</b>								18
<b>TOTAL ALLOWABLE (max. allowable 6 months)</b>								<b>6</b>

(Please ensure work products include examples from this time period)





**TABLE 9C: EMPLOYMENT HISTORY LOG – EMPLOYMENT FOLLOWING COMPLETION OF REQUIRED EDUCATIONAL COMPETENCIES**

EMPLOYER	POSITION	SUPERVISOR	DATE From	DATE To	DURATION Months	% of job Ergo related	FTE
Ergosomething (Toronto)	Associate Ergonomist	Jean Marinaro	01/06	06/07	18	50	9
<b>TOTAL</b>							<b>9</b>

#### 4.5.1.2 Employment History Log for Academics

If an applicant intends to claim Professional Experience related to an academic position, they must complete an Employment History Log for Academics ([Table 10](#)). Time spent on each of the Activities A to D should be provided for each academic position held. If claiming time under Activity A, please complete the Teaching Course Details Log ([Table 11](#)).

**TABLE 10: EMPLOYMENT HISTORY LOG FOR ACADEMICS WITH SAMPLE ENTRY**

Academic Position	Department	University	Period	Activity	Months
Associate Professor	Physical Science	UNBC	12/00 to 11/05	A. Preparation and teaching of ergonomics/human factors courses	5
				B. Ergonomics/human factors Research time	12
				C. Supervision of student undertaking ergonomics/human factors work	16
				D. Practical application of ergonomics/human factors in the field (consultancy)	6

#### 4.5.1.3 Teaching Course Details Log for Academics

All academics who have taught ergonomics/human factors-related courses and are claiming teaching time towards PED (Employment History Log for Academics – Activity A) must complete a Teaching Course Details Log ([Table 11](#)).

If counting academic teaching towards 25 years FTE, applicants need only to include the Course Name and University/College for ergonomics/human factors-related courses.



**TABLE 11: TEACHING COURSE DETAILS LOG FOR ACADEMICS WITH SAMPLE ENTRY**

Course Name	Contact Hours	Description	University/College	Dept/ Program
Human Computer Interaction ENSC-304	24h	This course gives an introduction to human computer interaction including the following topics: user-centred design, usability testing, task analysis and user requirements, display design and input devices.	Simon Fraser	Engineering

#### 4.5.2 Professional Competence (PC)

Professional competencies outlined in [Table 6](#) must be demonstrated through the provision of Work Products.

##### 4.5.2.1 Work Products

Work Products include documents such as publications, reports, design specifications, or other equivalent documents submitted by the applicant. One document can be used to demonstrate competencies in several areas but submission of at least three documents is required.

##### Work Product Guidance For all Application Categories

Minimum number of Work Products: 3

Maximum number of pages that will be read by the reviewer: 100

The Work Products must:

- demonstrate the professional competencies outlined in [Table 6](#)
- demonstrate awareness of the multiple disciplines upon which ergonomics/human factors draws ([Table 6, competency 15](#))
- demonstrate a breadth of work experience i.e. Work Products must not all be replications of similar evaluations of office or industrial workplaces
- be **tagged** within the document indicating where competencies are demonstrated (specific to page and paragraph/section); each tag must be labelled with the competency number from [Table 6](#). This mark-up is required in order to improve the readability of the application for the reviewer. Electronics comments can be used as tags.
- span the time frame claimed for PED;



If any Work Products are confidential, applicants must blank out the names, faces of person(s) in photos and company identifiers, and obtain permission from employers or clients to use the material prior to review by a Board Member. The Board guarantees confidentiality.

#### **4.5.2.2 Work Product Summary**

All CCPE applicants must complete a Work Product Summary [\(Table 12\)](#) for each work product. The Work Product Summary must describe how the applicant demonstrated each of the claimed competencies. The applicant must summarize the activities they performed within the project (Applicant's Role). The Work Product Summary must reference the page numbers within the Work Product where the competency is demonstrated. The work product summary must clearly direct the reviewer to the competencies within the work product. If a competency is not clearly demonstrated within the text of the Work Product (e.g. the steps taken to manage a time line), the applicant must provide descriptions in the Work Product Summary, email communications, etc. to allow the competency to be adequately evaluated by the reviewers.



**TABLE 12: WORK PRODUCT SUMMARY SAMPLE**

Work Product	Ergonomic evaluation of a consumer product	
Date Work Completed	June 30, 2010	
Summary of Project	The ergonomic team was asked to provide input into the design of a mop and bucket package. The analysis initially involved performing a task analysis of the typical uses of the product. This was done through interviews with typical user groups and the design team. Following this, the existing version of the mop and bucket was analyzed, and a variety of human factors issues were identified that could impact on usability of the product. During the re-design phase, I worked closely with the design team, analyzing and testing new concepts as they were developed, and providing feedback on human factors issues. The resulting modified product then underwent usability testing, based on both functionality and design criteria. Several additional modifications were made to the design following usability testing. The product has been re-released, and sales have shown increased user satisfaction with the design.	
Applicant's Role	I was the project leader. I was directly involved in performing the task analysis, working with the design team and performing usability testing. I wrote the report.	
Industry Sector and Context	Household Consumer Product. The client had complaints from users about the product and the design team were told to get an Ergonomist involved. There was initial resistance to the input by the Ergonomists. However, the final design modifications had buy in by all parties.	
Page No.	Competency	Description of how Competencies are met
2-3	1, 2	Assessed the ergonomics/human factors problem, developed initial proposed intervention supported by existing research literature.
1	4, 5	Worked with customer support group, marketing and design team to understand problem.
4	6	Undertook task analysis and observations with representative users
4, 7-9, 12	10, 12, 13	Identified user-centered design issues, prepared design specifications and worked with design team to redesign product. Tested redesigned product with user group. Fed design modifications back to team
15-16	11, 14	Prepared report for client that included estimated cost and payback time of financial investment to redesign product.
4, 8, 13-14	15	Design required use of anthropometric, economic and biomechanical knowledge as well as psychology of user interface and the social psychology of implementing change smoothly.
-	17	Kept the project on time using critical path analysis and monitoring of achievement of milestones as the project evolved.



#### 4.5.2.3 Mentor Letter (4 Years' Experience Application Category)

Once the Mentored Experience is complete, the Mentor is required to provide a Mentor Letter. The Mentor Letter must include:

- Mentor's qualifications
- duration and form of relationship
- dates of meetings and progress reports
- a description of how and when the applicant demonstrated the six mandatory competencies in [Table 6](#) (Competencies 1, 2, 6, 9, 13, 15), and to what level (adequate/satisfactory, moderate level, high level)

The Mentor Letter may also indicate how and when other Professional Competencies were demonstrated.

The Mentor Letter should be signed by the Mentor and countersigned by the applicant and returned with the application.

#### 4.6 Application Checklist

Each applicant must include a copy of the filled in [Application Checklist](#) with their application. See checklist at the front of this application kit.