

**ARCHITECTURAL INSTITUTE OF BRITISH COLUMBIA**

ARCHITECTURE CENTRE
 SUITE 100 - 440 CAMBIE STREET
 VANCOUVER, BC, CANADA V6B 2N5
 604/683-8588
 604/683-8568 FAX

Toll FREE IN BC 1/800/667-0753
 1/800/661-2955 FAX
 E-MAIL aibc@aibc.ca
 INTERNET <http://www.aibc.ca>

Gustavo E. Mibelli, AIA
Building Systems Seminar

Deadline: 17 September, 2010

COURSE REGISTRATION

Last Name:		First Name:	
Address:		City:	
Postal Code:		Daytime Telephone Number::	
Email Address:			
Course:		Gustavo E. Mibelli – Building Systems Seminar ARE 4.0	
Date:		25-26 September, 2010	
Time:		Saturday 8:00 am – 5:30 pm / Sunday 8:00 am – 5:30 pm	
Location:		AIBC offices	
AIBC Contact:		Emily Tyler – Registration Administration Assistant	
<i>The fee includes the course workbook. Morning and afternoon coffee/tea & snacks are also included.</i>	Course Fee	HST	Payment (including HST)
	\$350	\$42	\$392
HST#R122367840		Payment: \$	
<p>To register for this seminar we must receive your registration form and payment on or before the deadline date of 17 September, 2010. Please make payment out to the Architectural Institute of British Columbia.</p> <p>Enclosed is: <input type="checkbox"/> Cheque <input type="checkbox"/> Visa <input type="checkbox"/> MasterCard</p>			
Card Number		Expiry Date	
Cardholder Name		Signature (mandatory if paying by credit card)	
<p>Withdrawal Policy: Registration fees will be refunded upon request minus a \$50 administration fee + HST up to one week prior to the date of the course. Thereafter no refunds will be issued.</p>			

AIBC, 100 – 440 Cambie St., Vancouver, BC V6B 2N5 Toll Free Tel in BC 1-800-667-0753 Toll Free Fax in BC 1-800-661-2955. For course registration information, contact: Emily Tyler Email: etyler@aibc.ca Tel: (604) 683-8588 Fax: (604) 683-8568.	
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A.R.E. 4.0 - Building Systems Seminar

Gustavo E. Mibelli, AIA

September 25-26

AIBC Offices

Suite 100-440 Cambie Street

Vancouver, BC

V6B 2N5

General Information:

Please arrive 15-30 minutes early for each session.

Participants need to bring basic note-taking materials (note pad, pen, and pencils.) Hand-out material will be provided before the class, and it covers all seminar topics. This material will be digital, so students may use a laptop during the seminar; it is very extensive and in color. It can be printed in B&W. Neither drafting tools nor a calculator will be needed.

About the Instructor:

Gustavo E. Mibelli AIA has taught architecture for more than 25 years. As an architectural professor, he often guided an integrated design studio that incorporated systems, materials, and structures. He was born in Caracas, Venezuela, and currently works as a Senior Project Manager in Charlotte NC. He has degrees from North Carolina State University, Universidad Central de Venezuela, and Universidad Simon Bolivar. He has taught his ARE Mechanical and Electrical / Building System seminar in Jacksonville FL, Raleigh NC, San Juan PR, San Francisco Ca, Charlotte NC, and is also scheduled to teach at Anchorage AK, and New Orleans LA.

About the Course:

This is the test that has the highest failing number of candidates, and it covers a very large subject matter. Because of that, the material in this seminar is organized following an approach that facilitates learning. MS PowerPoint presentations will be used to manage sequence, time, and subject matter. Great emphasis is given to photographs, charts, diagrams, drawings, as topics in this ARE section require extensive use of visual examples.

Objectives:

- Understand approach needed to be successful taking the exam.
- Introduction and overview of material, and expected knowledge level.
- Cover some important and/or misunderstood topics in detail.
- Provide detailed references to specific information location and sources.
- Explain use of software for graphic section.

Saturday, September 25, 2010 – 8:00 – 5:30

- **Introduction to this seminar:** objectives and approach, bibliography, the role of time and test strategies.
- **Plumbing:** system design criteria, pipes, drainage system, vents, septic systems, connections.
- **Fire:** concepts, smoke, standpipes, sprinklers, extinguishers, alarms.
- **Acoustics:** sound properties, noise masking and reduction, absorptive materials.
- **Light:** illumination, inverse square law, light quality, day-lighting and other sources, illumination systems, and zonal cavity.

Sunday, September 26, 2010 – 8:00 – 5:30

- **Mechanical A:** comfort and the psychometric chart, heat gain and loss, sun path.
- **Mechanical B:** heating systems, hydronic circuits, compressive and absorptive refrigeration, local and central systems, single duct, constant air volume system, multi-duct system, air-water induction system, fan-coil system, closed-loop heat pump, selecting equipment, chiller, VAV boxes, cooling towers.
- **Electricity:** Ohm's Law, DC /AC, circuits and resistance, generation, electric motors, transmission and transformers, wiring and conduit, panels and switches.
- **Vertical Transportation:** elevators and escalators.
- **Sustainability:** Natural resources and the built environment, energy, Green Building /LEED, site planning, water efficiency, atmosphere, materials, and indoor quality
- **Vignette:** software, strategies and example