



Building Hydrographic Capacity On-Line and On-Site S-5B and S-8B

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Overview

- Motivation
- International Certification Scheme
- Global S-5B/S-8B – Design considerations
- IIC Academy / Deakin University
- Participants
- Practicals & Final Field Project
- Future



Motivation

Institutional

- Demand for personnel has exceeded supply
- Loss of trained personnel to other markets
- Increased contracting out by HOs to Industry
- Employee retention / career path / marketability
- Hydrographic Certification

Individual

- Cost of training travel, accommodations.
- Pressure of life / work / education balance
- Career growth, Hydrographic Certification, CPD
- Connected globally



Hydrographic Certification (Level 0, 1 and 2)

- 7.1 It is recommended that an ACLS Certified Hydrographer (CH or CHTech) or equivalent Certification recognized by the FIG/IHO/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC), be employed as part of the onsite team, for the duration of a project. These certifications will constitute part of the technical rating criteria of this RFSA.

Canadian Hydrographic Service

UKHO Hydrographic Survey Specifications

Charge Surveyor

“The Charge Surveyor must be accredited to HPAS Level 1 or 0 (or equivalent) and/or degree level hydrographic surveying qualification from an IBSC Category A recognised course

Australian HydroScheme Industry Partner Program - Statement of Requirement:

3.2 Surveyor in Charge (SIC)

The Contractor shall identify the SIC in their Survey Management Plan (SMP). The SIC is to be an AHSCP certified Level 1 Surveyor (CPHS1) and in date for Continual Professional Development (CPD) as per the list of certified Surveyors on the SSSI website. The SIC will be responsible for:

Hydrographic Certification Schemes





Approaches to Certification

Generally

Fast Track – Provides a concise and clear path to certification whereby the applicant has graduated from an IBSC recognized **Category A or Category B** educational program.

Medium Track – Provides a more complex approach to certification. The applicant has graduated with **a BSc in Geospatial Sciences (or equivalent) and has taken additional focused hydrographic surveying subjects.**

Slow Track – Provides a complicated, but achievable, approach to certification. **The applicant has graduated from a technical college or similar.** In this situation, the applicant is required to show proof of significant additional geospatial and hydrographic learning.



IBSC Recognized Programs

- 3-year time frame for completion
- Global Delivery (anywhere, anytime)
- Partnering with local institutions

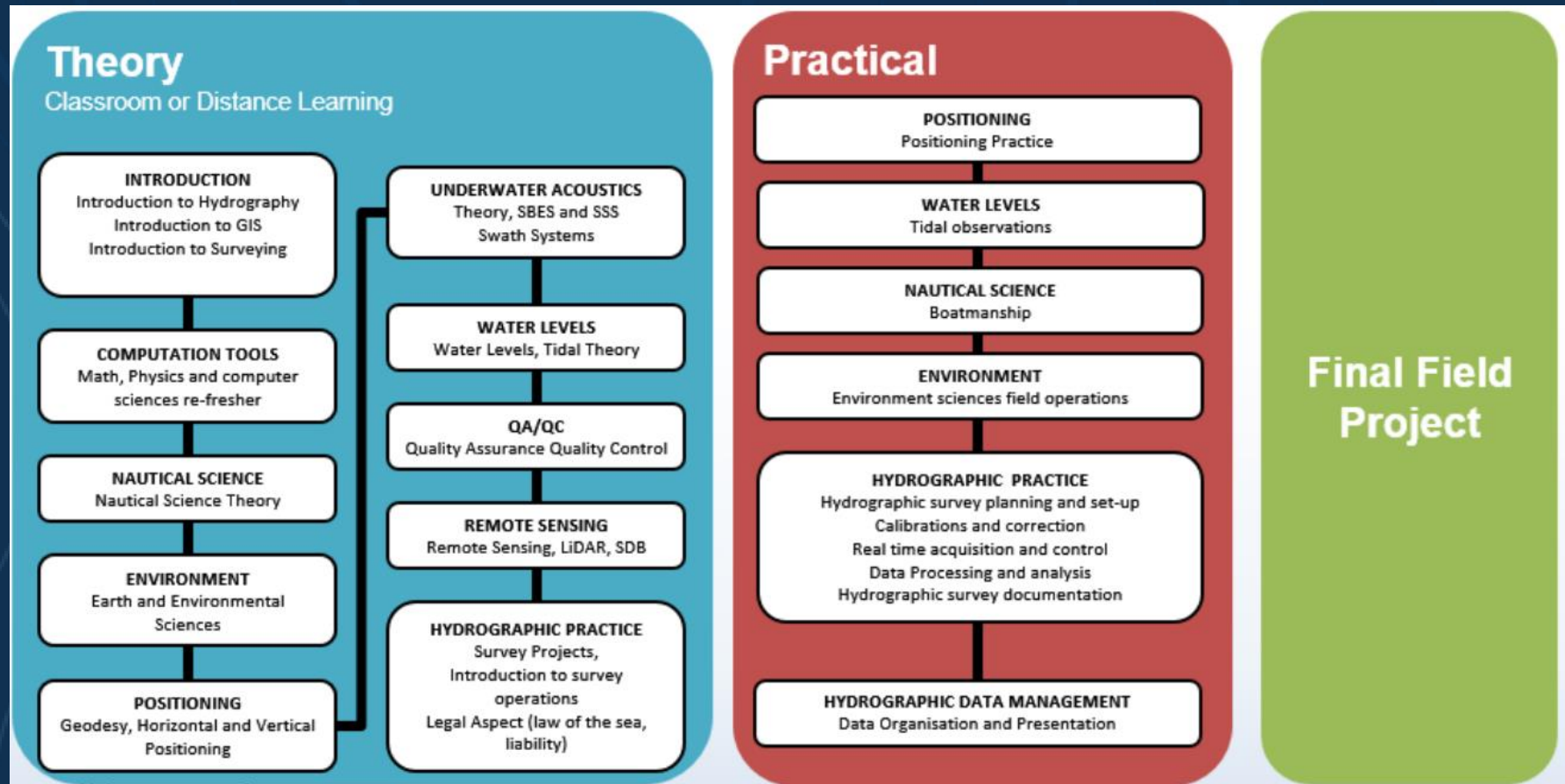




IIC Academy Cat S-5B Course Design and Delivery

On-line
(13 weeks content /
30 weeks to complete)

On-Site (Globally)
3 weeks 4 weeks





IIC Academy Cat S-8B Course Design and Delivery

On-line

(22 weeks content / 30++ weeks to complete)

Foundations of Marine Geospatial Information (10 Days)

- Introduction to Nautical Cartography
- Charting International framework and organizations
- Basic concepts of Cartography



Data Assessment, Compilation and Production (32 Days)

- Essential aspects of Nautical Chart production
- S-57 Object Catalogue
- Data Sources and Production Tools



Production and Validation (32 Days)

- Evaluation and Categorization of Bathymetric Surveys, CATZOC
- Workflow and Process Design
- ENC Production, Quality Management and S-65
- Chart Proofing and Printing, Raster Chart Production



Marine Environment: Physical Characteristics and Legal Issues (6 Days)

- Elements of Geology, Geophysics, Oceanography and Maritime Law
- Marine Environment and Cartography



Marine Spatial Data Infrastructure (5 Days)

- Concepts, Evolution
- Practical Deployments
- Role of MSDI in National and Regional Development



Remote Sensing (5 Days)

- Concepts, Sensors
- Data Formats and Preparations
- Remote Sensing in Cartography



Web-based Learning Components



Webinars

Instructor led



Presentations

Contents

Videos

Self-paced reading
Instructor monitors
progress time



Quizzes

Short Tests

Self-paced
Instructor monitors
re-takes
Instructor validates
results



Assignments

Exercises

Interaction with
instructor
Instructor corrects
and guides



Forum

Instructor
moderated
Instructor assesses
student participation



Tutoring

(if required)

Instructor led
Individual students
or small groups



Category S-5B Program (2021-22)



Partnership



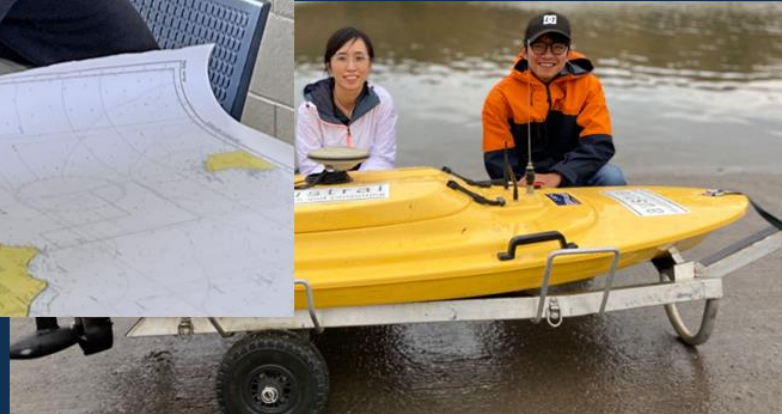
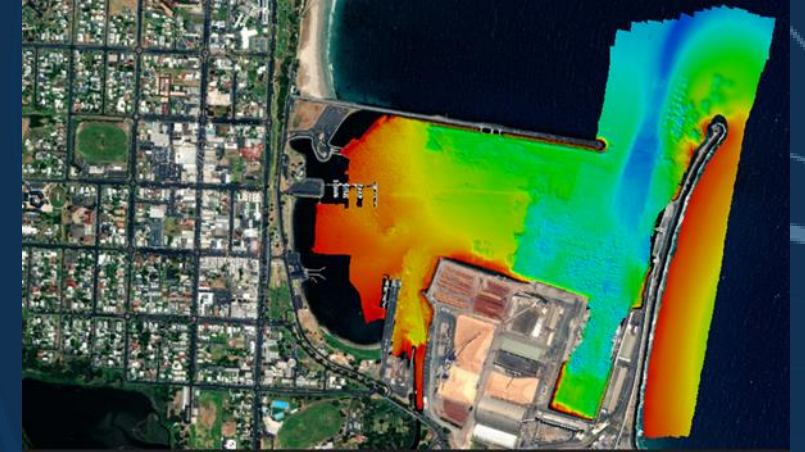
1st On-line

- Commenced September 2021
- Practical & Final Field Project – May 2022
- 10 students graduated

2nd On-line

- Commenced September 2022
- Practical & Final Field Project – May 2023
- 15 students currently enrolled

S-5B Practicals and Final Field Project



S-8B Practicals and Comprehensive Cartographic Project





2023 and Beyond (Partnering)

- Australia 2023 – 2024 program registration has commenced
- On-Line starts September 2023 (www.iicacademy.com)
- Partnering: With O2 METOCEAN and Deakin University
- Engagement with Govt, Pacific Islands and CB bodies
- North America, Europe, South America
- Seeking Partnering, Teaming, Delivery



Thank You

www.iicacademy.com

For more information on the S-5B course or to register:

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For more information on the S-8B course or to register:

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