



**INSTITUTO DE
AGRIMENSORES**
COLEGIO DE INGENIEROS Y AGRIMENSORES DE PUERTO RICO



**Study Group Agenda
15 de julio de 2023
Sede CIAPR Salón Ing. Harry Villegas
8:00am – 5:00pm**

FS – Fundamental of Surveying

8:00am – 12:00pm

Programing HP33s

1:00pm - 5:00pm

5. Survey Computations and Computer Applications

- A. Coordinate geometry
- B. Traverse closure and adjustments
- C. Leveling (e.g., differential, trigonometric, reciprocal, precise)
- D. Least squares adjustments
- E. Area
- F. Horizontal curves
- G. Vertical curves
- H. Volume (e.g., mass diagrams, earthwork)
- I. Spreadsheets
- J. Slopes and grades

PS – Principles and Practice of Surveying

8:00am – 12:00pm

Programing HP33s

1:00pm - 5:00pm

4. Business Practices

A. General Business Practices and Procedures

1. Project planning and project management
2. Deliverables
3. Costs, budgets, and contracts
4. Types of surveys
5. Site features and conditions
6. Scope of services
7. Appropriate equipment and instruments

B. Risk Management Procedures

1. Safety procedures
2. QA/QC methods
3. Risk management in contracts
4. Insurance needs and requirements
5. Potential liabilities

C. Professional Conduct

D. Communication with Clients, Staff, Related Professions, and the Public

1. Different forms of communications
2. Appropriate type of communication to convey concepts
3. Related professions and their impact on client needs and deliverables