



# Instituto Politécnico Nacional

## Escuela Superior de Cómputo

### Desarrollo de Aplicaciones Web

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# Propósito

- ① The student builds Web applications based on Java EE specification
  - ① Emphasis on the use of design patterns.
- ② Practical approach
  - ① Theory classes with practical approach.



# Contents

- Introduction to Web Applications
- Java Servlets
- Java Server Pages (JSP)
- Frameworks



# Lab

- Design and implementation of a Web Application.
  - During the course with the accompaniment of the teacher.
  - Covering the following topics:
    - Data Access.
    - Reports and Graphs Generation.
    - Java Mail.
    - Design Patterns.
    - Back End and Front End Frameworks.
    - Deploy on a free Platform as a Service Cloud.
    - Basis for the Final Course Project.



## Evaluation Criteria

	PP	SP	TP
Attendance	10	10	10
HomeWork	20	10	10
Exercises	20	20	20
Practices	20	20	25
Quiz	20	20	10
Projects	10	20	25
	100	100	100



## Class Schedule

3CM18

Lab	Salón	Tuesday	Wednesday	Friday
LS2	1012	07:00 - 8:30	07:00 - 08:30	07:00 - 08:30 Lab



# Development Environment

## Development Tools

- Apache NetBeans IDE 12.4
- PostgreSQL
- DBeaver 21.X.
- Itext.
- Apache Tomcat.
- Payara Application Server.
- Java Mail.
- JfreeChart.
- PrimeFaces.
- Other API's & Frameworks.



## Referencias



S. Genender, J.

*JSP: Practical Guide for Programmers.*, USA. Ed. Morgan Kaufmann. ISBN: 1-55860-836-2.



Bauer C. King, G.

*Java Persistence with Hibernate.*, USA. Ed. Manning. ISBN: 978-19-3239-488-7.



David, G.

*Professional Apache Tomcat.*, USA. Ed. Willey. ISBN: 978-04-7175-361-2.



Holmes, J.

*Core Java Server Faces.*, (2nd. Ed.), USA. Pearson Education. ISBN: 978-81-3171-944-2.