**UNIVERSIDAD PRIVADA DEL ESTE**

**FACULTAD DE CIENCIAS Y TECNOLOGIA**

**FILIAL CIUDAD DEL ESTE.**

**Carrera: Ingeniería Electromecánica**

# PLAN DE ESTUDIOS DE LA CARRERA Y CARGA HORARIA

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|  **FORMACIÓN BÁSICA** |
|  | **MATERIAS** | **HORAS SEMESTRE** | **TOTAL HORAS** |
|  | **1er. Semestre** | **CT** | **CP** | **LAB** | **Semanal** | **Mensual** | **Semestral** |
| **1.** | Física I | 44 h | 20 h | 0 | 4 h | 16 h | 64 h |
| **2.** | Cálculo I | 44 h | 32 h | 0 | 5 h | 20 h | 76 h |
| **3.** | Álgebra lineal I | 44 h | 20 h | 0 | 4 h | 16 h | 64 h |
| **4.** | Geometría Analítica  | 44 h | 32 h | 0 | 5 h | 20 h | 76 h |
| **5.** | Dibujo Técnico I | 44 h | 20 h | 0 | 4 h | 16 h | 64 h |
| **6.** | Inglés I | 28 h | 12 h | 0 | 3 h | 12 h | 40 h |
| **7.** | Informática I | 44 h | 20 h | 0 | 4 h | 16 h | 64 h |
|  | **TOTALES** | 292 h | 156 h | 0 | 29 h | 116 h | 448 h |

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|  | **MATERIAS** | **HORAS SEMESTRE** | **TOTAL HORAS** |
|  | **2do. Semestre** | **CT** | **CP** | **LABB** | **Semanal** | **Mensual** | **Semestral** |
| **8.** | Física II | 44 h | 32 h | 0 | 5 h | 20 h | 76 h |
| **9.** | Cálculo II | 44 h | 32 h | 0 | 5 h | 20 h | 76 h |
| **10.** | Álgebra lineal II | 44 h | 32 h | 0 | 5 h | 20 h | 76 h |
| **11.** | Dibujo Técnico II | 44 h | 20 h | 0 | 4 | 16 h | 64 h |
| **12.** | Inglés II | 28 h | 12 h | 0 | 3 h | 12 h |  40 h |
| **13** | Química General | 44 h | 20 h | 0 | 4 | 16 h | 64 h |
| **14.** | Informática II | 44 h | 20 h | 0 | 4 | 16 h | 64 h |
|  | **TOTALES** | 292 h  | 168 h | 0 | 30 h | 120 h | 460 h |
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|  | **MATERIAS** | **HORAS SEMESTRE** | **TOTAL HORAS** |
| **3er. Semestre** | **CT** | **CP** | **LAB** | **Semanal** | **Mensual** | **Semestral** |
| **15.** | Física III | 44 h | 32 h | 0 | 5 h | 20 h | 76 h |
| **16.** | Cálculo III | 44 h | 32 h | 0 | 5 h | 20 h | 76 h |
| **17.** | Probabilidad y Estadística | 44 h | 20 h | 0 | 4 | 16 h | 64 h |
| **18.** | Tecnología de Materiales | 44 h | 20 h | 12 h | 5 h | 20 h | 76 h |
| **19.** | Estática | 44 h | 20 h | 0 | 4 h | 16 h | 64 h |
| **20.** | Informática III | 44 h | 20 h | 0 | 4 h | 16 h | 64 h |
|  | **TOTALES** | 264 h | 144 h | 12 h | 27 h | 108 h | 420 h |

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|  | **MATERIAS** | **HORAS SEMESTRE** | **TOTAL HORAS** |
| **4to. Semestre** | **C T** | **C P** | **LAB** | **Semanal** | **Mensual** | **Semestral** |
| **21.** |  Física IV | 44 h | 32 h | 0 | 5 h | 20 h | 76 h |
| **22.** |  Cálculo IV | 44 h | 32 h | 0 | 5 h  | 20 h | 76 h |
| **23.** | Mecánica de Materiales | 44 h | 20 h | 0 | 4 h | 16 h | 64 h |
| **24.** | Dinámica | 44 h | 20 h | 0 | 4 h | 16 h | 64 h |
| **25.** | Termodinámica | 44 h | 20 h | 0 | 4 h | 16 h | 64 h |
|  | **TOTALES** | 220 h | 124 h | 0 | 22 h | 88 h | 344 h |

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| **FORMACIÓN PROFESIONAL** |
|  | **MATERIAS** | **HORAS SEMESTRE** | **TOTAL HORAS** |
| **5to. Semestre** | **C T** | **C P** | **LAB** | **Semanal** | **Mensual** | **Semestral** |
| **26.** | Mecánica de Fluidos | 54 h | 22 h | 0 | 5 h | 20 h | 76 h |
| **27.** | Materiales de Ingeniería | 44 h | 20 h | 12 h | 5 h  | 20 h | 76 h |
| **28.** | Circuitos Eléctricos I | 44 h | 20 h | 12 h | 5 h  | 20 h | 76 h |
| **29.** | Resistencia de Materiales | 44 h | 20 h | 0 | 4 h | 16 h | 64 h |
| **30.** |  Guaraní | 20 h | 16 h | 0 | 3 h | 9 h | 36 h |
| **31.** | Medición e Instrumentos | 44 h | 20 h | 12 h | 5 h | 20 h | 76 h |
| **32.** | Optativa I. | 44 h | 0 | 32 h  | 5 h | 20 h | 76 h |
|  | **TOTALES** | 294 h |  h | 78 h | 32 h  | 89 h  | 480 h |

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|  | **MATERIAS** |  **HORAS SEMESTRE** | **TOTAL HORAS** |
| **6to. Semestre** | **C T** | **C P** | **LAB** | **Semanal** | **Mensual** | **Semestral** |
| **33.** | Elementos de Máquinas | 44 h | 20 h | 0 | 4 h | 16 h | 64 h |
| **34.** |  Maquinas Eléctricas | 42 h | 24 h | 42 h | 7 h  | 28 h | 108 h |
| **35.** |  Circuitos Eléctricos II | 40 h | 12 h | 12 h | 3 h | 12 h  | 64 h |
| **36.** | Comunicación Castellana. | 20 h | 16 h | 0 | 3 h | 9 h | 36 h |
| **37.** | Optativa II | 44 h |  0 | 32 h | 4 h | 16 h | 76 h |
|  | **TOTALES** | 194 h | 84h | 42 h | 21 h  | 86 h | 348 h |

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|  | **MATERIAS** | **HORAS SEMESTRE** | **TOTAL HORAS** |
| **7mo. Semestre** | **C T** | **C P** | **LAB** | **Semanal** | **Mensual** | **Semestral** |
| **38.** | Máquinas Térmicas. | 44 h | 20 h | 12 h | 5 h | 20 h | 76 h |
| **39.** | Dinámica de Máquinas y Vibraciones. | 44 h | 20 h | 0 | 4 h | 16 h | 64 h |
| **40.** | Electrónica. | 42 h | 24 h | 42 h | 7 h  | 28 h | 108 h |
| **41.** | Máquinas Hidráulicas. | 44 h | 20 h | 0 | 4 h | 16 h | 64 h |
| **42.** | Optativa III | 32 h | 12 h | 32 h | 5 h | 20 h | 76 h |
|  | **TOTALES** | 206 h | 96 h | 86 h | 25 h | 100 h | 388 h |

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|  | **MATERIAS** | **HORAS SEMESTRE** | **TOTAL HORAS** |
| **8vo. Semestre** | **C T** | **C P** | **LAB** | **Semanal** | **Mensual** | **Semestral** |
| **43.** | Sistema de Control. | 44 h | 32 h | 0 | 5 h | 20 h | 76 h |
| **44.** | Dist. y Transm de Energía Eléct. | 44 h | 32 h | 0 | 5 h | 20 h | 76 h |
| **45.** | Administración Financiera. | 44 h | 32 h | 0 | 5 h | 20 h | 76 h |
| **46.** | Derecho Laboral. | 44 h | 32 h | 0 | 5 h | 20 h | 76 h |
| **47.** | Optativas IV. | 32 h | 12 h | 32 h | 5 h | 20 h | 76 h |
|  | **TOTALES** | 208 h | 140 h | 32 h | 25 h  | 100 h | 380 h |

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|  | **MATERIAS** | **HORAS SEMESTRE** | **TOTAL HORAS** |
| **9no. Semestre** | **C T** | **C P** | **LAB** | **Semanal** | **Mensual** | **Semestral** |
| **48.** | Centrales Eléctricas | 44 h | 20 h | 0 | 4 h | 16 h | 64 h |
| **49.** | Instalaciones Eléctricas | 44 h | 20 h | 0 | 4 h | 16 h | 64 h |
| **50.** | Economía y Evaluación deProyectos | 44 h | 20 h | 0 | 4 h | 16 h | 64 h |
| **51.** | Aire Acondicionado yRefrigeración | 44 h | 20 h | 0 | 4 h | 16 h | 64 h |
| **52.** | Optativas V | 44 h | 12 h | 20 h | 5 h | 20 h | 76 h |
|  | **TOTALES** | 220 h | 92 h | 20 h | 21 h  | 84 h | 332 h |

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|  | **MATERIAS** | **HORAS SEMESTRE** | **TOTAL HORAS** |
| **10mo. SEMESTRE** | **C T** | **C P** | **LAB** | **Semanal** | **Mensual** | **Semestral** |
| **53.** | Pasantía en Empresas | 300 h |  |  |  |  | 300 h |
| **54.** | Impacto Ambiental | 44 h | 20 h | 0 | 4 h | 16 h | 64 h |
| **55.** | Instalaciones Industriales | 44 h | 20 h | 0 | 4h | 16 h | 64 h |
| **56.** | Seguridad e Higiene Laboral | 44 h | 0 | 0 | 3 h  | 12 h | 44 h |
| **57.** | Optativas VI | 44 h | 12 h | 20 h | 5 h | 20 h | 76 h |
|  | **TOTALES** | 476 h | 52 h | 20 h | 12 h | 48 h | 548 h |

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# XIV. EJEMPLIFICACIÓN DE ALGUNAS OPTATIVAS.

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| **Nº** | **Materias Optativas** | **CT** | **CP** | **LAB** | **Semanal** | **Mensual** | **Semestral** |
| I **I** | Metalúrgica General | 44 h |  0 | 32 h | 5 h | 20 h | 76 h |
| **II** | Sistemas Hidráulicos y NeumáticosNeumáticos | 44 h | 0 | 32 h | 5 h | 20 h | 76 h |
|  **II** | Motores de Combustión Interna | 32 h | 12 h | 32 h | 5 h | 20 h | 76 h |
| **IV** | Ingeniería de Mantenimiento Eléctrico | 32 h | 12 h | 32 h | 5 h | 20 h | 76 h |
| **V** | Instalaciones Eléctricas Especiales | 44 h | 12 h | 20 h | 5 h | 20 h | 76 h |
| **VI** | Protecciones Eléctricas de Potencia | 44 h | 12 h | 20 h | 5 h | 20 h | 76 h |
|  | **Totales** | 240 h |  48 h | 168 h | 30 h  |  120 h |  456 h |

**Referencia**

CT: Clase teórica

CP: Clase práctica

LAB: Laboratorio – Taller