



Online training - Power network modeling and analysis with EA-PSM Electric

EA-PSM Electric Academy

Online training

EA-PSM Electric Academy is hands-on workshop during which you will be able to learn how to do power system studies faster and in better quality. You will know how to do Harmonic mitigation, Load flow, Motor starting, Protection coordination, Cable sizing and other studies.

You will get a supervision of experienced lecturer and will have an opportunity to implement gathered knowledge on Your projects.

Special offer:

Lecturer will support you how to do your project during the training also 2 months after training. **Consultancy on Your projects and EA-PSM Electric licence for 60 days** are included in the price.

1st day, 4 hours

Create your network single-line diagram with EA-PSM Electric

- ❖ Install EA-PSM Electric in your computer.
- ❖ Create single-line diagram.

Power flows in electrical power systems with cogeneration and renewable energy power plants

- ❖ Power quality standard requirements for grid voltage characteristics.
- ❖ Power grid state analysis after the connection of new load or power source.
- ❖ System with an operating reserve state analysis after the unexpected disconnection of a feeder.
- ❖ Analysis of transformer operation under maximum loading conditions.
- ❖ Tap changing transformers.
- ❖ Overhead lines and cables sizing, to meet techno-economic requirements.
- ❖ Voltage drop calculation.
- ❖ Equipment sizing and assessment of their loading conditions.

3rd day, 4 hours

Short circuits and equipment sizing

- ❖ Power grid parameters that are important for short circuit calculation.
- ❖ Short circuit current from power grid.
- ❖ Short circuit current from synchronous generator.
- ❖ Short circuit current from induction motor.
- ❖ Short circuit current from renewable energy power plants.
- ❖ Asymmetrical short circuits.
- ❖ Phase-to-phase short circuits in 0.4kV power systems.
- ❖ Phase-to-neutral short circuits in systems with isolated neutral.



2nd day, 4 hours

Operation states of electric motors and higher harmonics analysis in electrical systems

- ❖ Influence of motor start-up currents on the electrical network stability.
- ❖ Reactive power compensation with electric motors and sizing of reactive power compensation devices.
- ❖ Electric motors operation with variable frequency drives (VFD).
- ❖ Assessment of voltage distortion level conducted by higher harmonics in electrical network.
- ❖ Selection of VFD with lower and higher harmonics.
- ❖ Higher harmonics filtering.
- ❖ Resonant conditions for higher harmonics in networks with reactive power compensation capacitors.

4th day, 4 hours

0.4 kV - 35 kV networks protection coordination

- ❖ Low voltage fuses selection.
- ❖ Low voltage breakers selection and coordination.
- ❖ Coordination of fuses and breakers tripping curves.
- ❖ Characteristics of maximum short circuit current protection devices in medium voltage networks.
- ❖ Protection equipment against maximum short circuit currents settings calculation and sensitivity assessment.
- ❖ Protection equipment against phase-to-neutral short circuits settings calculation and coordination.



Who should attend this seminar?

- System Studies Consultants
- Electrical Power Systems Analysis Engineers
- Power System Modelling and Simulation Consultants

What will you learn?

- How to do power system studies.
- How to do more projects with greater quality and avoid common mistakes.
- How to create typical reports with EA-PSM Electric.

Additional information:

- During online training participant will solve real cases with the software EA-PSM Electric.
- Every participant will get Consultancy on their projects and EA-PSM Electric licence for 60 days.
- Small groups (up to eight).

Time: 15th, 22nd, 29th of April and 6th of May 2021 (From 1 to 5 p.m. EET GMT+2)

Registration ends: 8th of April 2021.

Price: 290 EUR, register till 1st of April 2021 and get 15% discount. EA-PSM users gets 50 % discount from initial price.

Place: Online training, more information you'll get after registration.

Contact us:

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