

Autodesk Subassembly Composer (SAC) software training (õppekeel inglise keel)

1. Õppekava nimetus:

Autodesk Subassembly Composer (SAC) software training

2. Õppekavarühm:

Arvutikasutus

3. Õpiväljundid:

- Student understands the SAC interface;
- Student knows what every SAC component does;
- Student understands how subassembly properties are seen when used within Civil 3D;
- Student understands how various modelling and targeting options within corridor are set up in SAC;
- Student knows various methods of managing subassembly logics;
- Student can use SAC API functions (regardless if has or hasn't any previous programming knowledge);
- Student can create his/her own Civil 3D subassembly and use it in Civil 3D corridor;
- Student understands the concepts of defining point, link and shape codes for extracting all related information from corridor models;
- Student knows some limitations of SAC and ways to overcome it;
- Student knows various methods to manage transitions (like slopes, curbs, widths);
- Student has basic knowledge to create a set of custom subassemblies for the whole office;
- Student will have some ideas about "Dos and Don'ts" based on real life experience.

4. Õpingute alustamise tingimused:

Civil 3D users with at least some experience, advanced Civil 3D users, CAD/BIM specialists. All types of road designers - mainly roadways, can be railways or waterways as well. Can be amelioration designers as well. Anyone whose design is linear and interacts with existing surface.

5. Õppe kogumaht:

16 ak/h auditoorset tööd, sh 90% praktilist. Tavaliselt jaotatud kahele päevale.

6. Õppe sisu:

- Overview and general information
- User interface
- Subassembly name and description
- Update process of subassembly after it's been used in Civil 3D
- User parameters - input, output, parameter types
- Parameter references from one subassembly to another
- Defining custom drop-down list as a user parameter
- Internal variables
- User targets - surfaces, vertical targets, horizontal targets
- Superelevation / Cant
- Controlling subassembly geometrical appearance in assembly
- Construction methods of geometry points - combination of coordinates, distances, slopes, angles, surfaces
- Geometry links and shapes
- Layer thickness calculation methods - vertical or perpendicular
- Codes of points, links and shapes
- Surfaces for construction works
- Strategies for geometry codes
- Geometry transition methods through region
- Methods of managing transitions without relation to region (for example, daylight slopes or curb height above pave)
- Specific issues with complex subassemblies and known workarounds
- Experience based "Dos and Don'ts"

7. **Õppekeskkonna kirjeldus:**

Kursus toimub Tallinnas, Usesofti koolitusklassis (Tobiase 8). Klassis on 8 hea varustusega arvutitöökohta, silmadele sõbralikud ekraanid, dataprojektor, pabertahvel, pauside ajal pakutakse kerget einet, küpsiseid, kohvi/teed/vett. Ruumides on ka avalik wifi.

8. **Lõpetamise tingimused ja väljastatavad dokumendid:**

Õpiväljundid loetakse omandatuks juhul kui õpilane on osalenud ja kaasa töötanud kursusel vähemalt 75% kursuse kogumahust, sooritanud positiivselt kursuse käigus. Iga kursuslane saab Usesofti Koolituskeskuse poolt õpiväljundite omandamist kinnitava tunnistuse. Kui õpilane on kursusel osalenud ja kaasa töötanud vähem kui 75% kursuse kogumahust, väljastatakse tõend.

9. **Koolituse läbiviimiseks vajaliku kvalifikatsiooni, õpi- või töökogemuse kirjeldus:**

Kursuse juhendaja Janis Prodnieks töötab BIM managerina AS "Ceļuprojekts", kus vastutab BIM valdkonnas Riia keskjaama disaini eest Rail Baltica projektis ja arendab disaini tehnoloogiaid ning protsesse „Autodesk Subassembly Composer (SAC) software training“ koolituse juhendaja on Janis Prodnieks.

Õppekava kinnitamise aeg: 13.10.2022