No	区分	Type	Title	Contents
1		AB3382	AB3382 - Autodesk® Revit® Architecture Certification Preparation Autodesk® Certification signifies your experience and expertise to employers and clients around the world and, as such, is a very powerful asset for design professionals.... View More90 Minutes Lecture John Herridge	Autodesk® Certification signifies your experience and expertise to employers and clients around the world and, as such, is a very powerful asset for design professionals. Autodesk highly recommends that you structure your examination preparation for success. This means scheduling time to prepare, reviewing the Exam Guide, using Autodesk Official Certification Courseware, and using a variety of resources to prepare for your certification. Equally as important, actual hands-on experience is recommended. In this class, you review this process, experience questions similar to those in the exam, and learn about the materials available to you to be successful in Revit Architecture Certification.
2		AB1412	AB1412 - Navigating Through the Storm Using Coordinate Systems in Autodesk® Revit® One cannot sail happily and safely without mastery of navigation coordinates, and the same holds true for any Autodesk Revit-based software user who works on projects with a... View More90 Minutes Lecture David Baldacchino	One cannot sail happily and safely without mastery of navigation coordinates, and the same holds true for any Autodesk Revit-based software user who works on projects with a multitude of linked models. This class "blows away the fog" covering coordinate systems in Revit and offers clarity so you can sail your way through the roughest of seas. We drill through all the means of controlling shared coordinates and lift the curtain of abstraction through rich, visual aids. Learn to properly rig your projects and linked files for perfectly-shared positioning and master the concepts behind survey and project base points. Following this class you will no longer have to rely on the Coast Guard for rescue and assistance and will garner the bravado of a true captain of the seas!
3		MP2845	MP2845 - Virtually Human: Modeling the Human Body Inside and Out Using BIM Platforms The study of human anatomy has traditionally been the domain of physicians, dentists, physiotherapists, nurses, paramedics, and other health professionals. What happens when... View More90 Minutes Lecture Andrew Duncan	The study of human anatomy has traditionally been the domain of physicians, dentists, physiotherapists, nurses, paramedics, and oth health professionals. What happens when you let building designers have a crack at replicating it? This class provides you with the opportunity to meet Project OVE, Arup’s virtual human. OVE has a full structural skeleton and respiratory system. OVE sweats, gets hungry, and even has a heart. We are still working on the operating system but OVE has a huge brain that will act as the main control center when finished. However, OVE is also more than just an artificial replication of the human body. Creating an intelligent version of OVE required us to exploit the full potential of Autodesk® Revit®-based software as a state-of-the-art BIM (Body Information Modeling) tool
4		SE2575	SE2575 - BIM and Bullets: Delivery of the 2012 London Olympic Shooting Venue The Royal Artillery Barracks Olympic Shooting Range was one of the standout arenas created for the London Olympic Games. Located in a traditional setting, this facility... View More90 Minutes Lecture James Middling	The Royal Artillery Barracks Olympic Shooting Range was one of the standout arenas created for the London Olympic Games. Located in a traditional setting, this facility caught the imagination of competitors, spectators, and the public, and it demonstrated the power of Building Information Modeling (BIM) in project design, manufacture, construction, and disassembly. There was a focus on workflow to empower disparate parties to embrace real collaboration. The use of technology was essential to achieving high-quality design. We created a 3D structural model of each building, which then became a hub for coordination with temporary frame contractors, manufacturers, and other designers. In this class, we illustrate the workflow used to take the generative models built using Rhinoceros® software into Autodesk® Robot™ Structural Analysis and Oasys GSA to perform structural design and then into Autodesk® Revit® Structure software using the Geometry Gym BIM plug-in.
5		AC2601-L	AC2601-L - A Dynamic Lab on Dynamic Block Creation in Autodesk® AutoCAD® Do you have a bloated block library due to many variations of the same block? Let’s take a door for example: because of different door widths, directions, thicknesses, and... View More90 Minutes Hands-on Lab Tracy Chadwick	Do you have a bloated block library due to many variations of the same block? Let’s take a door for example: because of different door widths, directions, thicknesses, and other variables, you can easily find yourself with hundreds of blocks. Let’s reduce that to one dynamic block that has the ability to take on those hundreds of variations. In this hands-on lab, you have the chance to make your own dynamic blocks that you can take back to work with you and instantly increase your productivity.
6		MP2904-L	MP2904-L - Autodesk® Inventor® and Autodesk® Revit®: Getting the Best of Both Worlds Autodesk® Inventor® software can be a great tool to create detailed models of various equipment that can be used in the building design industry. Autodesk® Revit®-based... View More75 Minutes Hands-on Lab Premkumar Siddharth	Autodesk® Inventor® software can be a great tool to create detailed models of various equipment that can be used in the building design industry. Autodesk® Revit®-based software can be a great tool to convey the design intent of different types of building design systems. Previously, if a detailed component was modeled in Autodesk Inventor, there was no easy way to bring that model into Autodesk Revit without losing the intelligence behind the model. Using the new Building Information Modeling (BIM) tools inside Autodesk Inventor, you can now prepare your model for export to Revit and control the parameters that go into Revit. You can further control and “flex” the model inside Revit, thereby retaining the intelligence of your models. In this hands-on lab, we explore this new and exciting functionality to teach you how to move models from Autodesk Inventor to Autodesk Revit while retaining the intelligence behind them.

No	区分	Type	Title	Contents
7		CR1506-L	CR1506-L-P - Construction Modeling in Autodesk® Revit® Structure: Tips and Tricks for Construction Utilization Construction and engineering professionals get hands-on training on how to transition from a LOD 300 to LOD 350 model for enhanced construction utilization. This lab and... View More75 Minutes Hands-on Lab Jeremiah Bowles	Construction and engineering professionals get hands-on training on how to transition from a LOD 300 to LOD 350 model for enhanced construction utilization. This lab and panel discussion demonstrates how to take full advantage of Autodesk Revit Structure software models using parts and assembly tools, rebar, parameter strategies, and advanced families to extend BIM into construction using Autodesk® Navisworks® Manage software to schedule, estimate, and use the Revit Structure model for shop drawings. We discuss the value of the engineering model and potential for contractors to use it in planning, sequencing, animation, location, detailed shop drawings, fabrication, and estimation. This lab features a Tilt-Up construction project example.
8		SE4060	SE4060 - Introducing Advance Steel™: A Tool for Structural Detailing and Fabrication Come to this class and discover Advance Steel, the BIM software product specifically designed for steel detailers and fabricators who require easy-to-use structural software... View More60 Minutes Lecture Philippe Bonneau	Come to this class and discover Advance Steel, the BIM software product specifically designed for steel detailers and fabricators who require easy-to-use structural software for automating drawing creation, documentation, and fabrication.
9		CI1435-R	CI1435-R - Enhancing Field Execution in Bridge Construction Usin Autodesk® Revit®, Autodesk® AutoCAD® Civil 3D®, and Autodesk® Inventor® This class uses a case study of the Saline Creek Bridge in Fort McMurray, Alberta, to demonstrate methods of using Autodesk Revit, Civil 3D, and Inventor software to create... View More60 Minutes Roundtable Drew Tea	This class uses a case study of the Saline Creek Bridge in Fort McMurray, Alberta, to demonstrate methods of using Autodesk Revit, Civil 3D, and Inventor software to create digital prototypes of bridge infrastructure projects to enable efficient and accurate construction of complex elements. We explore the workflow used for passing model information between Revit, Civil 3D, and Inventor, as well as methods of integrating survey and layout.
10		AC1960-R	AC1960-R - Switching from Autodesk® AutoCAD® to Autodesk® Revit®: Integration Versus Migration In this roundtable session we discuss switching from AutoCAD® to Revit®. Come and share how you have made the switch to Revit and how it affected your office and staffing.... View More60 Minutes Roundtable Steven Shel	In this roundtable session we discuss switching from AutoCAD® to Revit®. Come and share how you have made the switch to Revit and how it affected your office and staffing. What were your biggest successes and failures? Have a unique idea? Let's explore this complex issue together.
11		SE2078-R	SE2078-R - Autodesk® Robot™ Structural Analysis: Tips, Tricks, and Troubleshooting Techniques In this roundtable, we cover troubleshooting tips and techniques for issues that users may encounter while using Autodesk® Robot™ Structural Analysis software. We look at the... View More60 Minutes Roundtable Artur Kosakowski	In this roundtable, we cover troubleshooting tips and techniques for issues that users may encounter while using Autodesk® Robot™ Structural Analysis software. We look at the most frequent types of issues posted on the Robot forum, and attendees learn how to troubleshoot and resolve them or how to avoid them.
12		SE3338	SE3338 - Customizing the Graphical Column Schedule: Adding Parameters The graphical column schedule (GCS) in Autodesk® Revit® Structure may be a system family that cannot be edited in the Family Editor, but this does not mean that it cannot be... View More60 Minutes Lecture Felix Olmos	The graphical column schedule (GCS) in Autodesk® Revit® Structure may be a system family that cannot be edited in the Fami Editor, but this does not mean that it cannot be customized. This class discusses how the graphical column schedule can be customized to suit your needs. We demonstrate how to create parameters within the column families so that information, such as base plate sizes and detail information, shows up dynamically in information boxes within the GCS. We also cover how to create custom column tags. The main focus of the class is to show how to schedule steel columns; however, the fundamentals of this class can also be applied to concrete, concrete masonry units (CMU), or even timber columns
13		CI1754-R	CI1754-R - BIM for Infrastructure in Concrete Terms Civil engineers have used 3D model-based design for over 2 decades, so the line between CADD and BIM is not clear. Using examples drawn from real bridge, tunnel, highway and... View More60 Minutes Roundtable Francesca Maier	Civil engineers have used 3D model-based design for over 2 decades, so the line between CADD and BIM is not clear. Using examples drawn from real bridge, tunnel, highway and transit projects, we discuss how to differentiate between CADD and BIM. We find a place for analytical models, introduce terminology, such as "level of development" (LOD), and identify how goals, processes, products, and applications differ through the project lifecycle. We also make sense of CADD Standards, construction plans, and 3D deliverables in the context of a BIM workflow that manages liability. We document our discussion in a Venn diagram that helps to communicate what BIM means for infrastructure.

No	区分	Type	Title	Contents
14		CR1685-L	CR1685-L-P - Every Building Has Its Price: Finding It with Autodesk® Navisworks® Manage 2014 Quantification Every building truly does have its price and one of the most time-consuming items during the estimation process is to perform and complete a building takeoff. In this... View More75 Minutes Hands-on Lab Jason Dodds	Every building truly does have its price and one of the most time-consuming items during the estimation process is to perform and complete a building takeoff. In this hands-on lab, we teach you how to use Navisworks Manage 2014 Quantification workflows to help you minimize your time doing takeoffs. We use 3D models (Autodesk® Revit® Architecture software) to complete our tasks in this class. You learn to understand the Navisworks Manage 2014 Quantification software interface and the tools in the software, and leave the class feeling ready to tackle the coming takeoff challenges.
15	Reco	BO1410	BO1410 - Implementing Information Modeling in a Large Firm This class details the process of implementing information modeling at a large multidiscipline firm with nationwide locations. Highlights include evaluation methods of... View More60 Minutes Lecture Jennifer Taylor	This class details the process of implementing information modeling at a large multidiscipline firm with nationwide locations. Highlights include evaluation methods of existing technology, strategies for incorporating company acquisitions, and the importance of understanding the role of the “human factor” when building workflows that challenge proven and conventional methods. Understand how standardization enables synchronization of processes and how to ensure that implementation efforts remain global in scope.
16		AC2241-L	AC2241-L - Autodesk®360 with AutoCAD® 360 Web/Mobile: How Powerful Are These Tools? Ever since Autodesk® web services and mobile applications were first introduced—Autodesk® AutoCAD® 360 (formerly AutoCAD® WS) and Autodesk® 360 cloud-based services—Andrzej... View More75 Minutes Hands-on Lab Andrzej Jaskulski	Ever since Autodesk® web services and mobile applications were first introduced—Autodesk® AutoCAD® 360 (formerly AutoCAD® WS) and Autodesk® 360 cloud-based services—Andrzej Jaskulski has run his yearly “Autodesk Authorized Author Spring Laboratory” which has explored the advantages and disadvantages of this solution. Each year, after tests were complete, he has written a new book for a well-known training series in Poland called AutoCAD–Design Course. In this hands-on-lab, he shares his knowledge and experience on the power of these tools, identifies their strong and weak points, and explains how to avoid problems in individual and concurrent design workflows. Attendees have the opportunity to practice with desktop, mobile, and cloud configurations. They should also be able to assess how effective this solution can be in their business or design office. To benefit from this class, attendees should have a basic knowledge of Autodesk® AutoCAD®
17		MA1855	MA1855 - The Force Is Strong with You: Get the Full Effect of Autodesk® ForceEffect™ Mobile and Web Apps Mobile and web apps are a new dimension for today’s digital experiences. They have created new possibilities for location-free access, flexibility of form factor, and dynamic... View More60 Minutes Lecture Anirban Ghosl	Mobile and web apps are a new dimension for today’s digital experiences. They have created new possibilities for location-free access, flexibility of form factor, and dynamic collaboration. The ForceEffect family of mobile simulation apps provides real-time engineering analysis during the concept design phase. This class provides an overview of the apps and explains how you can integrate them into your overall design workflow while saving time, boosting creativity, and reducing costly design changes down the line.
18		CM3026	CM3026 - The Languages Everyone Understands: Math, Money, and BIM A carefully planned BIM workflow enabled the design team to create both coordination and structural analysis models for a structure with highly complex geometry extremely... View More60 Minutes Lecture Michael Davic	A carefully planned BIM workflow enabled the design team to create both coordination and structural analysis models for a structu with highly complex geometry extremely fast and efficiently. Using Autodesk® AutoCAD® as a central hub of geometric definitions, the design team was able to communicate seamlessly between Rhinoceros®, Autodesk® Revit®-based software, and SAP2000®. This resulted in the architecture, coordination, and analysis models all matching each other perfectly while also making it easy to track changes and update the models as the design progressed
19		CM1316-R	CM1316-R - Connecting the National CAD and BIM Standards The National Building Information Modeling Standard (NBIMS) doesn’t attempt to define graphical standards so the United States National CAD Standard (NCS) remains the... View More60 Minutes Roundtable Johnny Fortune	The National Building Information Modeling Standard (NBIMS) doesn’t attempt to define graphical standards so the United Stat National CAD Standard (NCS) remains the standard for the foreseeable future. The NCS still applies because much of the output from BIM is still printed drawings and CAD exports. Which standard applies to what? Where should those transitioning from a CAD to BIM environment look within these standards for guidance? A BIM module is being developed to interconnect the National CAD Standard and the National BIM Standard to address these questions and more. This roundtable discussion gives attendees the opportunity to provide input that shapes a BIM module within the National CAD Standard to interconnect the standards. Attendees also gain knowledge on how to get involved in future development of the standard
20		SE3240	SE3240 - Combining the Speed of Conceptual Modeling Tools with BIM Detailing and Documentation In the contemporary AEC industry, it is as crucial to be able to quickly conceptualize and visualize a design as it is to document and, ultimately, materialize it rapidly and... View More60 Minutes Lecture Gustav Fagerstrom	In the contemporary AEC industry, it is as crucial to be able to quickly conceptualize and visualize a design as it is to document and, ultimately, materialize it rapidly and reliably. This class covers the use of specialized tools and methods for conceptual early stages modeling and their integration into a BIM environment (Autodesk® Revit® Structure software) that enables reliable material assignment, quantification, and documentation.

No	区分	Type	Title	Contents
21		AB2007-R	AB2007-R - Autodesk® Building Design Suite: BIM Roundtable This roundtable discussion is designed to bring to the table those like-minded individuals who have the following in common: A desire to share their experiences based on a... View More60 Minutes Roundtable Ajit Menon	This roundtable discussion is designed to bring to the table those like-minded individuals who have the following in common: A desire to share their experiences based on a successful deployment of Autodesk Building Design Suite workflows that take full advantage of the range of product solutions available in the suite. The roundtable explores past and existing project-based solutions and best practices while looking to use the range of products in Building Design Suite in a successful project workflow. The discussion also looks at technical problems that were encountered during this process and explores suggestions on how to resolve them. The concluding part of this roundtable addresses the lessons learned and looks to exchange a set of practical hints and tips that can assists the group in achieving a highly productive workflow.
22		SE3048-L	SE3048-L - Creating Steel Fabrication Friendly Families and Schedules with Autodesk® Revit® Structure Once you have mastered the day-to-day use of Autodesk Revit Structure, you must continue to push the boundaries toward enhanced integration for construction purposes. One of... View More75 Minutes Hands-on Lab Tina Bos	Once you have mastered the day-to-day use of Autodesk Revit Structure, you must continue to push the boundaries toward enhanced integration for construction purposes. One of the most commonly used materials in a structural engineer’s arsenal is structural steel. In this hands-on lab, we focus on using the information contained within Revit and the information we can derive from within custom family content to create enhanced structural steel schedules. This class is about the use of shared parameters and custom families to facilitate greater symmetry with steel fabricators through the use of smarter families and schedules.
23		AC2660-L	AC2660-L - Annotation Scaling in AutoCAD®: Bringing the Technology Home Learn how to implement annotation scaling in your organization. Whether you would like to start with baby steps or go full bore, in this class you can learn all levels of... View More75 Minutes Hands-on Lab KaDe King	Learn how to implement annotation scaling in your organization. Whether you would like to start with baby steps or go full bore, in this class you can learn all levels of migrating these tools into your daily workflow. Learn about annotation scaling and how it works with hatching, text, linetype scale, dimensions, and all of the other options. See how you can "bring this technology home," improve your productivity, and reduce unnecessary hours spent on annotations. This class is designed to assist you in building a new workflow for annotation in your organization.
24		AB2586	AB2586 - Design Computation Symposium An increasing number of designers, architects, and engineers are using graph-based visual programming and scripting techniques to generate and optimize design solutions. The... View More210 Minutes Lecture Matt Jezyk	An increasing number of designers, architects, and engineers are using graph-based visual programming and scripting techniques generate and optimize design solutions. The Design Computation Symposium is a forum for presenting the results of this new approach to design and for discussing the development and use of computational design tools. With conventional computer-aided design, the designer uses interactive and direct modeling techniques to create or edit the design. By comparison, a computational designer uses scripting and other graph-based programming techniques. The script essentially captures the logic of the design and its execution generates the design solution, or indeed generates numerous design alternatives. This year’s symposium features a number of different presentations from accomplished researchers, practitioners, and educators which focus on the fascinating relationship between logic, geometry, architectural form, analysis, simulation, and digital fabricatior
25		CI1671	CI1671 - Tunneling Design in Autodesk® AutoCAD® Civil 3D® and Autodesk® Revit® Structure Learn how to create tunnel sections and corridor modeling solids for tunnels in Autodesk AutoCAD Civil 3D software. Learn how Civil 3D interacts with Autodesk Revit Structure... View More90 Minutes Lecture Edmundo Herrera	Learn how to create tunnel sections and corridor modeling solids for tunnels in Autodesk AutoCAD Civil 3D software. Learn how Civil 3D interacts with Autodesk Revit Structure software and how to manipulate tunnel solids, obtain drawings, and create reports, volumetrics, and visualization in Revit Structure. Finally, learn how to model a tunnel natively in Revit Structure and export it to Civil 3D.
26		PL3677-P	PL3677-P - Autodesk® Vault for the Enterprise: Evaluation, Implementation, and Integration The class provides an overview of the overall process of implementing Autodesk Vault software in an integrated systems environment. Follow the process of our company’s... View More90 Minutes Lecture Michael Dorland	The class provides an overview of the overall process of implementing Autodesk Vault software in an integrated systems environment. Follow the process of our company’s journey from the first steps of assessing existing conditions to a final vision of integration with other systems and workflows.
27	Reco	SE1591	SE1591 - Incorporating Engineering into Autodesk® Revit® Structure: Advanced Families This class presents several custom families that incorporate structural engineering within the families themselves. By integrating engineering into custom families, a... View More90 Minutes Lecture Desiree Mackey	This class presents several custom families that incorporate structural engineering within the families themselves. By integrati engineering into custom families, a structural engineer can capitalize on more features of Revit Structure to aid in the engineering design process. The families demonstrate several tools within the Family Editor, including nesting, formulas, conditional statements, reporting parameters, and visibility settings. In a companion class, "SE1592: Incorporating Engineering into Autodesk® Revit® Structure: Project Procedures," these families and all of their features are demonstrated within the project environme

No	区分	Type	Title	Contents
28		CM2155-R	CM2155-R - Digital Design Management: A Roundtable Discussion In today's rapidly changing technology environment, "digital design" no longer means just CAD. It's also BIM, IT, analysis/design, and visualization...with a little bit of... View More90 Minutes Roundtable Kate Morrical	In today's rapidly changing technology environment, "digital design" no longer means just CAD. It's also BIM, IT, analysis/design, and visualization...with a little bit of training, accounting, R&D, and diplomacy thrown in for good measure. Join Kate for a roundable discussion of what "digital design management" (or your synonym of choice) means to you and your firm. Bring your challenges and success stories to share with your peers, and pick up some valuable techniques and strategies to take home.
29		SE2925	SE2925 - Autodesk® Revit® Structure as a Tool for Modeling Concrete Reinforcement Autodesk Revit Structure software provides tools for modeling 3D concrete reinforcement in an advanced Building Information Modeling (BIM) environment. This class provides... View More90 Minutes Lecture Håvard Vasshaug	Autodesk Revit Structure software provides tools for modeling 3D concrete reinforcement in an advanced Building Information Modeling (BIM) environment. This class provides insight into how to use these tools in the best way for creating complete, detailed, and accurate reinforcement design. Learn how to use the standard reinforcement modeling, drawing, and scheduling tools. Discover the possibilities in using Adaptive Components for complex concrete forms and post tensions tendons. Get new ideas on using 3D models in reinforcement construction, at the expense of drawings. If you believe in a future where engineers, contractors, and fabricators communicate reinforcement design using the most intuitive way possible yet—the visual 3-dimensional representation of the future—then this class is for you!
30		BO2337-R	BO2337-R - Beyond the Software: Managing a BIM Adoptio Successfully the First Time This roundtable session introduces the attendees to the "soft" requirements for a successful implementation of BIM; that is, those requirements that are beyond the software... View More90 Minutes Roundtable Charlie Bus	This roundtable session introduces the attendees to the "soft" requirements for a successful implementation of BIM; that is, tho requirements that are beyond the software and technology. Topics are introduced and then attendees analyze them using discussion and workshop activities.The topics covered are ones that have been successful for firms who have already integrated BIM, those that are in the process of implementing BIM and those that are still getting started. Attendees are exposed to the experiences of others, both the good and the bad.
31		SE1990-R	SE1990-R - Autodesk® Robot™ Structural Analysis API Roundtable: Customize Your Design Join us for this roundtable session that features interaction with Autodesk Robot API experts. Get answers to your questions and discuss all relevant topics of your choice.... View More60 Minutes Roundtable Rafal Gawed	Join us for this roundtable session that features interaction with Autodesk Robot API experts. Get answers to your questions and discuss all relevant topics of your choice. If you are writing or willing to write add-ins for Autodesk Robot software, then this is the perfect forum to get to know the subject and the people who use the Robot API.
32		CM1699	CM1699 - Minimizing the Migration Migraines: Lightening the Workload of Upgrading Releases Streamlining your templates and custom tools and objects in Autodesk® AutoCAD® and Autodesk® Revit-based software can drastically reduce the amount of time that you spend... View More60 Minutes Lecture Matt Krebs	Streamlining your templates and custom tools and objects in Autodesk® AutoCAD® and Autodesk® Revit-based software can drastically reduce the amount of time that you spend every spring to prepare your firm to update to the new Autodesk releases. This class shows examples of how Thornton Tomasetti’s reduced use of tool palettes in AutoCAD and custom families in Revit have greatly lessened the amount of time needed to prepare our in-house standards for the yearly release of Autodesk software.
33		PL1833-P	PL1833-P - It Takes a Village, People! Designing in Community wit Autodesk® Revit®-Based Software and Autodesk® Vault In today's collaborative world, data management is more important than ever. The oftentimes difficult task of working together to meet project deadlines can be eased with a... View More60 Minutes Lecture Adam Peter	In today's collaborative world, data management is more important than ever. The oftentimes difficult task of working together to meet project deadlines can be eased with a detailed understanding of how Autodesk Vault software and Revit-based software work hand in hand. This class takes an in-depth look into the roles of Revit, Revit Server, and Vault and explains how they can be configured for easy use and overall management.
34		SE1669	SE1669 - Generation of Rebar Objects Using Results from Analysi and Design This class demonstrates automatic generation of reinforcement elements using results from analysis and design in Autodesk® Revit® Structure 2014 software. Design requirements... View More60 Minutes Lecture Thomas Finl	This class demonstrates automatic generation of reinforcement elements using results from analysis and design in Autodesk® Revit® Structure 2014 software. Design requirements from building codes and company standards can be controlled by user-defined rules similar to the approach used in expert systems. Various aspects of this expert system are discussed. Visualization of existing and needed reinforcement further support users to ensure their quality of work.

No	区分	Type	Title	Contents
35		CI1889-R	CI1889-R - Implementing Autodesk® Vault in an Infrastructure Engineering Company: An Actual Experience This class shares our know-how about implementing Autodesk® Vault software in an infrastructure engineering company. We provide information on all stages of implementation:... View More60 Minutes Roundtable Darius Simkunas	This class shares our know-how about implementing Autodesk® Vault software in an infrastructure engineering company. We provide information on all stages of implementation: choosing the best document management system (DMS), as well as analysis, implementation planning and strategy, installation, system configuration, and adaptation to company needs. We discuss results of DMS system analyses and pilot projects, and we provide arguments for choosing Vault over Bentley® ProjectWise® or any other DMS system. We share Vault best practices for managing infrastructure projects and business processes. We also share experience on Vault integration into Autodesk® AutoCAD® Civil 3D®, Autodesk® AutoCAD®, Autodesk® AutoCAD® Map 3D, Autodesk® AutoCAD LT®, Microsoft® Office, and Bentley® MicroStation® software. You also learn how to configure and maximize link efficiency between Vault and an Autodesk® Buzzsaw® server.
36		SE1588-L	SE1588-L - The Prolific Potential of Parts Parts first became available in Autodesk® Revit® Structure 2012 and has been widely improved upon since then. This hands-on lab starts with a discussion of the evolution of... View More75 Minutes Hands-on Lab Desiree Mackey	Parts first became available in Autodesk® Revit® Structure 2012 and has been widely improved upon since then. This hands-on lab starts with a discussion of the evolution of the Parts tool since it was introduced and explores the many potential applications and uses for this tool. From collaboration and coordination with other disciplines to increasing internal efficiency, this tool has immense potential in the design phase of a project. The lab exercise enables attendees to use the tool and try out some of the features in a simulated project. In addition to covering the positive aspects of this tool, this lab also discusses and demonstrates some prospective challenges associated with using Parts in various applications.
37		AB2761	AB2761 - Scrub, Tina, Scrub! An Oregon State Hospital Case Study in Keeping a Clean Autodesk® Revit® Model This class shows a case study of Oregon State Hospital in Junction City, Oregon. It is the second site of a 2-campus hospital replacement project for the Oregon State Health... View More60 Minutes Lecture Thomas Whisker	This class shows a case study of Oregon State Hospital in Junction City, Oregon. It is the second site of a 2-campus hospital replacement project for the Oregon State Health Authority and is led by the HOK–San Francisco office along with SRG Partnership in Portland. This class covers the challenges of sharing a project between 2 firms over the course of several years. We discuss the best practices for keeping a model clean, lean, and organized so that it may be used effectively by a large team over the Internet. We show how to efficiently categorize and maintain views, schedules, sheets, families, and worksets. Also of importance is the use of view templates for maintaining consistent documentation in multiple models. Focus is given to consistent model purging and warning cleanups. We also talk about methods of communication among internal and external teams, consultants, and contractors using tools such as a project execution plan (PxP), best practices documentation, and Autodesk® Navisworks® software.
38		SE2143-R	SE2143-R - Working Roundtable in Autodesk® Revit® Structure 2014 Autodesk Revit Structure software is not arcs, lines, and circles—it is pieces, parts, and information! How do you work in Revit Structure? I know how I work in Revit... View More60 Minutes Roundtable NICK HUGLEY	Autodesk Revit Structure software is not arcs, lines, and circles—it is pieces, parts, and information! How do you work in Revit Structure? I know how I work in Revit Structure, and I'm going to share this with you. I will show you how and what I'm looking for from an Autodesk® Revit® Architecture model before and during a project. I will share information about content, both out-of-the-box and custom content. I will discuss the different construction types I've worked in Revit Structure: steel, concrete, masonry, and wood. I'll share highlights about each, both for modeling and documentation. I'll discuss model documentation, which I'm passionate about. I'll cover how you can take advantage of enhanced scheduling features in Revit 2014 and how you can use displaced views for clearer documentation. I work in Revit Structure everyday—there's a lot I will share with you! Come to this roundtable and share your Revit Structure techniques and challenges.
39		SE3193	SE3193 - A Practical Strategy and Workflow for Large Projects: A Realistic Solution This class presents a strategy for development of structural projects using Autodesk® Revit® Structure, Autodesk® Vault, Autodesk® Navisworks, Autodesk® Design Review, and... View More60 Minutes Lecture Marco Brasiel	This class presents a strategy for development of structural projects using Autodesk® Revit® Structure, Autodesk® Vault, Autodesk® Navisworks, Autodesk® Design Review, and Autodesk® Robot™ Structural Analysis software. Learn about every step of a workflow for large projects, including setting up the LAN environment, creating Revit central files, generating links among architectural and MEP files, defining the stakeholder groups, and drawing and model reviews. This class also brings up some best practices, limitations, advantages, and tips for designers and BIM managers.
40		AC4127-L	AC4127-L - Autodesk®360 with AutoCAD® 360 Web/Mobile: How Powerful Are These Tools? - REPEAT Ever since Autodesk® web services and mobile applications were first introduced—Autodesk® AutoCAD® 360 (formerly AutoCAD® WS) and Autodesk® 360 cloud-based services—Andrzej... View More75 Minutes Hands-on Lab Andrzej Jaskulski	Ever since Autodesk® web services and mobile applications were first introduced—Autodesk® AutoCAD® 360 (formerly AutoCAD® WS) and Autodesk® 360 cloud-based services—Andrzej Jaskulski has run his yearly “Autodesk Authorized Author Spring Laboratory” which has explored the advantages and disadvantages of this solution. Each year, after tests were complete, he has written a new book for a well-known training series in Poland called AutoCAD–Design Course. In this hands-on-lab, he shares his knowledge and experience on the power of these tools, identifies their strong and weak points, and explains how to avoid problems in individual and concurrent design workflows. Attendees have the opportunity to practice with desktop, mobile, and cloud configurations. They should also be able to assess how effective this solution can be in their business or design office. To benefit from this class, attendees should have a basic knowledge of Autodesk® AutoCAD®.

No	区分	Type	Title	Contents
41		FB2971	FB2971 - Modeling Precast Concrete to a Shop Drawing Level Using Autodesk® Revit® Structure This class covers modeling techniques for using Autodesk® Revit® Structure to model precast concrete elements and their associated connection elements to a fabrication level.... View More90 Minutes Lecture Daniel Mccloskey	This class covers modeling techniques for using Autodesk® Revit® Structure to model precast concrete elements and their associated connection elements to a fabrication level. The examples presented are representative of a typical precast concrete building. We learn how to create custom profiles and families for precast elements and how to model these elements to a fabrication-level of detail. Attendees learn how to create smart families for typical precast parts and pieces such as connection elements and daps. We also cover how to manage the data in a precast concrete fabrication model and how to efficiently present this in the form of shop drawings. Third-party applications used for modeling of precast, as well as linking data with Microsoft® Excel®, are also presented.
42		SE1595	SE1595 - Using Autodesk® Revit® Structure in Investigative Engineering This class shares a project that was completed for investigative engineering purposes—not for building design. The original goal of this project was to generate a visual aid... View More90 Minutes Lecture Desiree Mackey	This class shares a project that was completed for investigative engineering purposes—not for building design. The original goal of this project was to generate a visual aid of an engineering failure to be used as part of an expert witness report; however, the project evolved into much more. The families and corresponding model that were created incorporated structural engineering such that the model not only provided a visual aid to show deflection of roof members due to ponding water, but actually calculated the amount of deflection that could be expected due to a given amount of rain. We cover how these families (1 structural framing family and 1 adaptive component) and the model were created, as well as the lessons learned after completing such a project.
43		SE1511-L	SE1511-L - Modeling Complex Shapes in Autodesk® Revit® Structure Using the Conceptual Massing Environment This hands-on lab focuses on using the conceptual massing environment in Revit Structure software to create complex roofs and walls and other complex shapes, such as a... View More90 Minutes Hands-on Lab Jeremiah Bowles	This hands-on lab focuses on using the conceptual massing environment in Revit Structure software to create complex roofs and walls and other complex shapes, such as a transmission tower or even a battleship. We walk through creating the mass framework and then get into the project. We explore advanced techniques to make trusses, complex beams, and columns that host the mass constructs. We also explore the workflow of how to manage change with these tools and how to master these techniques.
44		BO3158	BO3158 - The Business Proposition for Developing Custom Tools In the era of 2D CAD, many firms invested in custom tools and development staff to write and maintain them. A firm's overall experience varied in terms of the success of this... View More90 Minutes Lecture Robert Manna	In the era of 2D CAD, many firms invested in custom tools and development staff to write and maintain them. A firm's overall experience varied in terms of the success of this investment and just about everyone has a story to tell about being "burned" from spending money developing custom tools. However a number of market forces are coming into play that continue to drive the need to customize the Autodesk® Revit® software platform, and the question is, "Do you rely entirely on third-party software or go back down the road of customization?" This class explores the benefits of investing in the development of custom tools for your firm, and shows how Revit is really "different this time" for those who have a horror story to tell. This class looks at the tools Stantec has developed in the last year and the return on investment we have already seen. We also examine our overall strategy and approach to development.
45		BO1572-R	BO1572-R - The Real Impact of the Autodesk Yearly Release Cycle on Long Term BIM and IPD Projects In the “real world”, most architecture and engineering projects span multiple releases of Autodesk® Revit® software. In many organizations, a question that comes up with... View More90 Minutes Roundtable Brett Gatti	In the “real world”, most architecture and engineering projects span multiple releases of Autodesk® Revit® software. In many organizations, a question that comes up with every new release is, "Which projects should we migrate to the new software version and which ones should we finish in their current version?" This roundtable session gives principals in charge, project managers, BIM managers, architects, engineers, and others who are involved in long-term Revit projects an open forum to discuss the best ways of dealing with the Autodesk yearly release cycle. We weigh potential benefits (such as added functionality) against possible pitfalls (such as hidden costs, features that don't work as expected or as they did in previous releases) and discuss how the decision to upgrade or not has to involve the entire collaborative project team. We also talk about the pros and cons of skipping specific releases.
46		SE1303	SE1303 - Advanced Topics About the RISA-Autodesk® Revit® Structure Link Learn the best practices to make your integration between RISA and Revit Structure software as seamless as possible. This class covers common pitfalls and mistakes and... View More90 Minutes Lecture Matt Brown	Learn the best practices to make your integration between RISA and Revit Structure software as seamless as possible. This class covers common pitfalls and mistakes and teaches you how to avoid them. We also cover all of the advanced features of the RISA-Revit Link, including how to use custom families and libraries when integrating with RISA. Extra time is allotted for Q&A.
47		CM1431	CM1431 - Digital Design Management: A Hybrid Role for a Changing World In today's rapidly changing technology environment, "digital design" no longer means just CAD. It's also BIM, IT, analysis/design, and visualization...with a little bit of... View More90 Minutes Lecture Kate Morrical	In today's rapidly changing technology environment, "digital design" no longer means just CAD. It's also BIM, IT, analysis/design, and visualization...with a little bit of training, accounting, R&D, and diplomacy thrown in for good measure. One structural engineering firm has decided to recognize this growing overlap of disciplines with a role created specifically to address it: Digital Design Manager. Join Kate for a discussion of what digital design management (DDM) means to Robert Silman Associates, and how having this position in the company has improved communication, collaboration, and adoption of new technologies. A followup roundtable session, "CM2155-R Digital Design Management: A Roundtable Discussion" offers the opportunity to continue the conversation.

No	区分	Type	Title	Contents
48		RC2854	RC2854 - Recap of Laser Scanning: Existing and Historic Structures with New Design—4 Case Studies This class provides an in-depth discussion of best practices for using laser scanning in building a design with existing and historic structures. As more projects are... View More90 Minutes Lecture WILL IKERD	This class provides an in-depth discussion of best practices for using laser scanning in building a design with existing and historic structures. As more projects are designed in 3D from the beginning, architectural, structural, and MEP are faced with the challenge of dealing with existing structures. We address the how and why of laser scanning, which is an ideal choice for documenting these structures. This class discusses laser scanning by reviewing several project case studies. The first project is the $135-million new renovation of the 1926 San Antonio Performing Arts building. Three other projects include a parking garage, a new office space remodel, and new loft apartments, each of which is going into buildings that are over 100 years old and for which there is no as-built information. This class also highlights the use of Autodesk® ReCap™ reality capture software and the new features in 2014 Autodesk products specifically tailored for laser scanning.
49		SE2311	SE2311 - Improving Your Deliverables with Autodesk® Revit® Structure and SDS/2 Connect Model accuracy is vital to Building Information Modeling (BIM) projects, and connections are a critical component of making the model accurate. SDS/2 Connect, an add-in to... View More90 Minutes Lecture Doug Evans	Model accuracy is vital to Building Information Modeling (BIM) projects, and connections are a critical component of making the model accurate. SDS/2 Connect, an add-in to Autodesk® Revit® Structure software, makes incorporating code-based connections and transferring the model downstream for manufacturing easier and more accurate than ever before. This class features real-world case studies from engineering companies who have incorporated SDS/2 Connect into their Revit Structure workflow. Highlights include how companies employ SDS/2 Connect as a way to keep the project schedule on track while providing project owners with the ability to secure more competitive bids, use the connection design functionality to avoid erection clashes during the design phase of the project, and create a more valuable deliverable for the owner and architect.
50		AB3020	AB3020 - Size Does Matter: Learn How to Scale and Morph Families in Autodesk® Revit® Have you ever wanted to scale a family in Autodesk Revit software or were just curious to know how to do it? This class shows you how! Have you ever noticed that when you... View More90 Minutes Lecture Marcello Sgambelluri	Have you ever wanted to scale a family in Autodesk Revit software or were just curious to know how to do it? This class shows you how! Have you ever noticed that when you select a family in Revit, the “scale” command is always grayed out? This means that scaling a family in Revit is not as simple as selecting the family and using the scale command. However this class shows you how to scale any family in Revit by applying simple scale principles. This class also shows you how to morph a family in Revit because scaling and morphing are the same phenomenon. There are many ways to scale a family in Revit but the scaling and morphing methods presented in this class are simple, efficient, practical, unique, and fun and all are controlled by just 1 parameter each.
51		MP2884	MP2884 - Design of Stadia Using BIM: Multidisciplinary Interaction for the Benefit of All This class presents a case study of the design of the new Casement Park stadium in West Belfast, Ireland. Located on a tight site, this new Gaelic Athletics site posed... View More90 Minutes Lecture Richard Clibborn	This class presents a case study of the design of the new Casement Park stadium in West Belfast, Ireland. Located on a tight site, this new Gaelic Athletics site posed numerous design challenges. We explore the use of Building Information Modeling (BIM) throughout the MEP and structural design of this project, with particular focus on how the integrated design team used the entire Autodesk® Building Design Suite to benefit all parties. The engineering models were linked to Vico Office for 5D and to Autodesk® Navisworks® for the 4D construction planning. Structural analysis was assisted by links to Autodesk® Robot™ Structural Analysis, and the model was used for lighting analysis and people flow modeling. These workflows facilitated a more efficient design process for all parties. This class also looks at anticipated future directions for workflows that will improve the design process.
52		SE2080	SE2080 - Autodesk® Revit® Structure: Model, Design, Connect, and Fabricate Steel Buildings Autodesk industry partners with CSC and Design Data have combined their expertise to deliver the first smooth Building Information Modeling (BIM) process for the entire... View More90 Minutes Lecture Kevin Lea	Autodesk industry partners with CSC and Design Data have combined their expertise to deliver the first smooth Building Information Modeling (BIM) process for the entire design of steel structures. This process links Fastrak™ from CSC, Autodesk Revit Structure software, and SDS/2 Connect from Design Data software. This class demonstrates how a fully code-compliant design of the steel structure can be produced in Fastrak, which can be synchronized with Revit Structure to create BIM documentation and with SDS/2 Connect for the full design and detailing of the steel connections. The fully designed Revit model can then be exported to SDS/2 Detailing software to create the fabrication model. Integration between Fastrak, SDS/2 Connect, and Revit Structure is a powerful solution for the steel industry. Bridging the information gap between design and fabrication shortens timelines, enhances project communication, and ultimately reduces project costs.
53	Reco	AB2064	AB2064 - Revisiting Project Templates: Maintaining Consistency and Company Standards In the last 2 years, Autodesk® Revit®-based software has added a number of features that make it even more important to maintain a solid company template that can help to... View More90 Minutes Lecture Robert Manna	In the last 2 years, Autodesk® Revit®-based software has added a number of features that make it even more important to maintain a solid company template that can help to ensure high-quality, consistent documents and data. Yet at the same time projects are constantly evolving along with your standards, or your firm is so large that a single template can't fit all that you need. This class examines some of the key feature changes in Revit, their impact on how your project teams work, workflows for how to make sure project teams can get the latest standards, and a review of some simple API utilities that can make it even easier for users to fully use the benefits of the project template you've worked so hard to build.

No	区分	Type	Title	Contents
54		CI1934-P	CI1934-P - Civil and Building BIM Coordination for Real It almost goes without saying that the structural, architectural, and civil engineering disciplines need to coordinate closely. We need to, for example, ensure that the... View More90 Minutes Lecture Robert Clark	It almost goes without saying that the structural, architectural, and civil engineering disciplines need to coordinate closely. We need to, for example, ensure that the building foundations do not clash with the utilities. Also, it is important that all parties are on the same page in regards to site coordinates to effectively coordinate and build. In this class, we build a basic site in Autodesk® AutoCAD® Civil 3D® software, then we extract the coordinates and use Autodesk® Revit® software to develop our site coordination for multiple buildings using shared coordinates. We use Autodesk® Navisworks® software to detect clashes between the Revit structural foundations and Civil 3D utilities. We produce a clash report before switching back to Revit to resolve. Finally we update the clash report with the resolution. Time permitting, we also discuss principles of using Autodesk® 360 cloud services.
55		AC1832-L	AC1832-L - Parametric Drawing in Autodesk® AutoCAD®: It's All About Relationships Relationships are everywhere, from traditional relationships like family and friends to wildly popular social networking sites like Facebook and Twitter. But did you ever... View More90 Minutes Hands-on Lab Rick Ellis	Relationships are everywhere, from traditional relationships like family and friends to wildly popular social networking sites like Facebook and Twitter. But did you ever think that your Autodesk AutoCAD software objects could have relationships? Well they can, and those relationships can be a powerful tool that can make you much more productive. The parametric drawing tools will revolutionize the way that you draw and edit objects in AutoCAD. This class introduces you to parametric drawing in AutoCAD by using both geometric and dimensional constraints to add intelligence to your objects. You learn how using Auto Constrain and Inferred Constraints can help you quickly add constraints and change your process from drafting to modeling. If you have ever wanted geometry in your drawing to update based on changes that you have made to other objects or if you have wanted to type a new value into a dimension and have the object update based on this new value, then this class is for you.
56		SE3142-L	SE3142-L - Modeling Reinforcement and Creating Shop Drawings in Autodesk® Revit® Structure In this hands-on lab, you learn how to model reinforcement and create shop drawings from the model in Autodesk Revit Structure software. We use a typical parking garage as an... View More75 Minutes Hands-on Lab Daniel Mccloskey	In this hands-on lab, you learn how to model reinforcement and create shop drawings from the model in Autodesk Revit Structure software. We use a typical parking garage as an example, and demonstrate techniques to use various tools within Revit, third-party add-ins, Revit® Extensions, and parts and assemblies to model rebar. We learn which modeling techniques are practical for different types of concrete elements, such as drilled piers, columns, beams, slabs, and walls. We then use the scheduling tools in Revit Structure, as well as add-ins that export and import our schedules to Microsoft® Excel®, to create and modify rebar bend schedules for the use in shop drawings and for export to fabrication. The new features in Revit Structure 2014, particularly the ability to apply overrides to the default host constraint behavior on a selected rebar element, are demonstrated. We also learn how to create custom tags and annotation elements that are useful in creating rebar shop drawings.
57		SE1510	SE1510 - BIM for Existing Buildings: Best Practices Capitalizing on Building Information Modeling (BIM) for new buildings is easy—you get to start with a fresh, clean file, and you can lay out everything you need precisely... View More60 Minutes Lecture Kate Morrical	Capitalizing on Building Information Modeling (BIM) for new buildings is easy—you get to start with a fresh, clean file, and you c lay out everything you need precisely where it is supposed to be. However, what if you are doing an addition, a renovation, or historic preservation? Most of what is important to a structural engineer is probably hidden behind an existing facade or finish. And yet the model must go on. This class offers tips and suggestions for modeling existing structures, including extrapolating information from incomplete data, identifying known and unknown elements, and managing ownership of scope are.
58		MA1893	MA1893 - From BIM to Manufacturing and Back: Bridging the Gap Through Automation In today's complex and fast-paced Digital Prototyping world, architects and engineers need to share data and workflows between Building Information Modeling (BIM) systems and... View More60 Minutes Lecture Neil Lee	In today's complex and fast-paced Digital Prototyping world, architects and engineers need to share data and workflows betwe Building Information Modeling (BIM) systems and engineering and manufacturing systems. Part families and members defined and managed in the intelligent model need to be passed to engineering to drive detailed modeling, analysis, and ultimately, manufacturing. Likewise, vendors supplying engineered systems to the buildings need to provide their detailed engineering models and data in usable and efficient formats for inclusion in intelligent models. With Autodesk products, you can capture and automate these workflows that are critical success factors in today's large multidisciplinary projects. In this class, you learn about architectures and tools for implementing and automating these workflows and for seamlessly bridging the gap between BIM, engineering, and manufacturir
59		CI1741-R	CI1741-R - BIM for Rail Projects This roundtable session looks beyond rail tracks, and outlines the workflows for running a rail project from planning through detailed design and construction sharing design... View More60 Minutes Roundtable Jack Strongitharm	This roundtable session looks beyond rail tracks, and outlines the workflows for running a rail project from planning through detailed design and construction sharing design data. We discuss design of civil-based structures, such as platforms and combining it all with station building design. We also discuss checking the track design from a driver's point of view for signal sight analysis.

No	区分	Type	Title	Contents
60		AB2653	AB2653 - Link Details to Multiple Projects in Autodesk® Revit® Working on campus projects, strip malls, or any type of multi-building project inevitably brings up the discussion of how to manage the details. Often a major driving factor... View More60 Minutes Lecture Brian Mackey	Working on campus projects, strip malls, or any type of multi-building project inevitably brings up the discussion of how to manage t details. Often a major driving factor in choosing how to manage the details depends on whether all of the buildings will be included in one set of construction documents or if each building will be a separate set of documents. Based on the project and which of the 2 previously mentioned approaches is selected, there are a number of strategies that can be implemented within Autodesk Revit-based software to help streamline the construction document process. This class covers a few scenarios of multi-building projects and discusses which approach to detail management may be the most appropriate. In addition, the class reveals and discusses the pros and cons to each approach so that you will be able to apply the most appropriate strategy to your own multi-building project
61		FB3249	FB3249 - Autodesk® Revit® Structure Modeling for Fabrication A complete game changer in the contemporary architecture, engineering, and construction industry is the advent of 3D procurement and fabrication information, which eliminates... View More60 Minutes Lecture Gustav Fagerstrom	A complete game changer in the contemporary architecture, engineering, and construction industry is the advent of 3D procurement a fabrication information, which eliminates the more traditional tender and shop drawing processes. Great benefits can be derived downstream during fabrication modeling if modeling work in previous phases has been carried out with the appropriate principles in mind. This class outlines principles of Autodesk Revit Structure modeling that is specifically geared to projects in which full fabrication modeling and connection design as well as 3D-based tendering and steel mill orders are being planned f
62		DV2020	DV2020 - Customizing Autodesk® Revit® 2014 IFC Export Open Source Code Since the Autodesk Revit 2012 release, Industry Foundation Classes (IFC) export from Revit has been based on .NET open source code, enabling Revit API users who are familiar... View More60 Minutes Lecture Angel Velez	Since the Autodesk Revit 2012 release, Industry Foundation Classes (IFC) export from Revit has been based on .NET open source code, enabling Revit API users who are familiar with IFC to make their own customized versions of both the exporter and the associated UI. This class covers the major design concepts for the export code with the intention of understanding how to modify the open source code or how to create a custom exporter on top of the existing exporter. This class is intended for advanced users who know the principals of API development and/or IFC, and it includes looking at Revit 2014 open source .NET code.
63		BO2014	BO2014 - Communication Tips for Building and Maintaining Client Relationships Client relationships are the very foundation on which great businesses are built and maintained. While major corporations like HP and Lockheed have famous brands and hundreds... View More60 Minutes Lecture Curt Moreno	Client relationships are the very foundation on which great businesses are built and maintained. While major corporations like HP and Lockheed have famous brands and hundreds of account managers who specialize in dealing with clients, small businesses have to take a much more direct approach. Whether you are the owner of a sole proprietorship, the head of a growing firm, or a project manager working in a small company, communicating with your client is the most important skill you can develop. Join us in a discussion to bring out the common, everyday difficulties that your peers face. Learn how to build solid relationships and create open communication with your client. Also, learn how to repair client relationships that may have gone awry. Whatever your title, role, or goal, this discussion can help you relate to your clients and open the communication that is necessary to transform clients into advocates.
64		SE2086	SE2086 - Beyond Buildings: Advanced FEM Analysis and BIM in the Offshore Industry This class covers the use of several software products, including Autodesk® Revit® Structure and Autodesk® Robot™ Structural Analysis Professional, for applications in the... View More60 Minutes Lecture Håkon Frank Bardason	This class covers the use of several software products, including Autodesk® Revit® Structure and Autodesk® Robot™ Structural Analysis Professional, for applications in the offshore energy and marine industry rather than the traditional building industry. These structures are often steel dominated and usually require advanced finite element method (FEM) analysis. We show examples from relevant projects and explain the workflow between the different software products used in the projects. We also show how the Robot API (application programing interface) can be useful for improved workflow between various analysis and modeling tools for complete detail engineering. You should be familiar with Robot, or another similar FEM analysis tool, and be open to API programming.
65		SE1592	SE1592 - Incorporating Engineering into Autodesk® Revit® Structure: Project Procedures This class demonstrates how to use custom families that incorporate structural calculations within a project environment. In addition, this class shares some project... View More60 Minutes Lecture Desiree Mackey	This class demonstrates how to use custom families that incorporate structural calculations within a project environment. In addition, this class shares some project procedures and tools that will enhance the capabilities of Autodesk Revit Structure software for engineers, such as working schedules, calculated values, and conditional formatting. By integrating engineering into custom families and project procedures, a structural engineer can make use of more features of Revit to aid in the engineering design process. This class covers several custom families and procedures and how to incorporate various methods, through conditional formatting and visibility settings, to notify the engineer if any of the components are overstressed or otherwise “not working." In the companion class, "SE1591 Incorporating Engineering into Autodesk® Revit® Structure: Advanced Families," the custom families are discussed and demonstrated within the Family Editor.
66		SE3215	SE3215 - Say Goodbye to Paper: Using Autodesk® Revit® Structure in a Digital Shop Model Review Process This class covers the use of Autodesk Revit Structure software in a workflow designed to share the engineer’s model directly with a fabricator for downstream use. Being able... View More60 Minutes Lecture Johann Palacios	This class covers the use of Autodesk Revit Structure software in a workflow designed to share the engineer’s model directly with a fabricator for downstream use. Being able to take models to the next level by using them in a digital review process is a natural step, and this class shows how paper-based shop drawing review can be minimized, if not altogether eliminated. We present a case study describing how a digital shop model approval process was used in lieu of the traditional paper shop drawing process along with the value experienced for the project. This class also touches on best practices and limitations and shows attendees how to create a checklist that enables a project to use models as part of the shop drawing review process.

No	区分	Type	Title	Contents
67	Reco	AC1337	AC1337 - Mighty Macros: Powerful Commands to Pump Up Productivity This class is filled with all the tips and tricks you'll need to create macros in Autodesk® AutoCAD® software. Macros are small groups of commands and routines that can be... View More60 Minutes Lecture Sam Lucido	This class is filled with all the tips and tricks you'll need to create macros in Autodesk® AutoCAD® software. Macros are small groups of commands and routines that can be any length, without requiring any special characters at the end of the line. In this class, you learn to create custom macros that apply to your business needs and enhance your productivity on designs. You develop a custom tool palette placing over 50 of your new macros on the palette for quick access during project design. Most importantly, what you learn will bring value to your employer and give you knowledge that can help you excel within your field.
68		FB1846	FB1846 - Precast Concrete Industry Extensions for Autodesk® Revit ® Structure 2014 This class shows how extensions to Autodesk Revit Structure software can dramatically speed up creation of precast elements. We show you how to split walls into producible... View More60 Minutes Lecture Reinhard Lackner	This class shows how extensions to Autodesk Revit Structure software can dramatically speed up creation of precast elements. We show you how to split walls into producible panels with automatic creation of connections such as anchor plates, connection loops, grout tubes and dowels. We look at the Revit parts with the dividing lines and the creation of assemblies and describe how the same precast elements can be found automatically. The class also covers how to use the split tools in Revit Structure to split the walls manually. We see how reinforcement and the lifting anchors are created automatically through predefined rules. We go through the automatic creation of shop drawings and data for the production in the precast factory. With the defining of the transport stacks and the production line, you see the full workflow from design to production for wall panels inside of Revit Structure.
69		SM1571-L	SM1571-L - Introduction to Using Autodesk® Simulation Products to Simulate Solar Thermal Loads in Concrete Bridges In this hands-on lab, learn how Autodesk® Inventor® Professional, Autodesk® Simulation CFD, and Autodesk® Simulation Mechanical design tools can empower structural engineers... View More75 Minutes Hands-on Lab Peggy Menzies	In this hands-on lab, learn how Autodesk® Inventor® Professional, Autodesk® Simulation CFD, and Autodesk® Simulation Mechanical design tools can empower structural engineers and architects to accurately assess designs for the infrastructure of our growing world. Autodesk design and creation suites are a smorgasbord of design tools, many with unlimited cloud computing capabilities. Creatively exploring various combinations and interoperability functions of Autodesk Simulation tools in nontraditional workflows can have a profound effect on design. This lab provides an opportunity to practice the workflow and techniques in a hands-on environment. A case study shows the techniques that are needed then justifies using simulation tools and workflows to accurately predict the thermal profile and resultant stresses through validation against measured bridge data. Attendees learn how Inventor designs can be analyzed for thermal loads using Simulation CFD and for thermal stresses using Simulation Mechanical.
70		DV2918	DV2918 - In It for the Long Haul: Tips for Serious Autodesk® Revit ® Add-In Developers So is it you or your add-in that’s serious? Both? Then this class is for you. You learn how to wrap your own domain-specific logic around the Autodesk Revit API while... View More60 Minutes Lecture Joel Spahn	So is it you or your add-in that’s serious? Both? Then this class is for you. You learn how to wrap your own domain-specific logic around the Autodesk Revit API while managing database transactions and sub-transactions along the way. We discuss strategies for handling changes to your add-in that are likely to occur over time including modifying and upgrading data structures and Revit families. I share some successes and failures from my own experience and things you need to consider so your add-in doesn’t get eaten alive once it ventures into the wild. We also briefly touch on several other topics including geometry parsing, view-specific versus view-independent API functionality, error handling, and licensing your add-in. Attendees should have a basic understanding of the Revit API and C# or Visual Basic® programming concepts.