No	区分	Type	Title	Contents
1		CR3095-L	CR3095-L - Getting Control of the Project: Improving Model-Based Layout Using Survey Control Establishing control on the jobsite is essential for doing layout with a total station. Without control points, the BIM data can’t be referenced to the physical jobsite.... View More90 Minutes Hands-on Lab Shannon Lightfoot	Establishing control on the jobsite is essential for doing layout with a total station. Without control points, the BIM data can’t be referenced to the physical jobsite. Control can be established many different ways. The object is to establish the most accurate control that you can to ensure efficient multi-trade model-based layout. This hands-on lab highlights the new features of the Get The Point (GTP) plug-in for improving survey control workflows within Autodesk® AutoCAD®, Autodesk® Revit®-based software, and Autodesk® Navisworks® Manage software.
2	Rec	CI1646	CI1646 - Let’s Hit the Road, Jack: A BIM Workflow for Roads and Highways This class takes you through an example workflow for a road and highway design project using Autodesk® Infrastructure Design Suite Ultimate 2014 software. We start with... View More90 Minutes Lecture Michelle Rasmussen	This class takes you through an example workflow for a road and highway design project using Autodesk® Infrastructure Design Suite Ultimate 2014 software. We start with Autodesk® InfraWorks™ software for the conceptual and preliminary design phases. Autodesk InfraWorks 360™ is used to perform vertical optimization of the road design. Then it is moved into Autodesk® AutoCAD® Civil 3D® software for the detailed design and construction documentation phases. Next, we take the design into Autodesk® Navisworks® Manage software to perform clash detections and validate the design components coming from Autodesk® Revit® Structure software and Civil 3D. Finally, the design goes back into InfraWorks and into Autodesk® 3ds Max® Design software to perform visual communication about the design to key stakeholders. Various types of analysis is performed along the way to validate the design and ensure design parameters are being met.
3		AB2922-L	AB2922-L - Autodesk® Revit® Families: Step-by-Step Advanced Concepts The power and potential of the Autodesk Revit Family Editor is vast, and 90 minutes just doesn't do it justice. Dispensing with the basics, this hands-on lab jumps right into... View More90 Minutes Hands-on Lab Paul Aubin	The power and potential of the Autodesk Revit Family Editor is vast, and 90 minutes just doesn't do it justice. Dispensing with the basics, this hands-on lab jumps right into the deep end of the pool. (If you need to brush up on the basics, video recordings of many Family Editor basics are posted on my website for all attendees.) In this hands-on lab, we explore advanced parameters and the use of formulas to drive the geometry. Whether you are new to the Family Editor or just want to use its more advanced features, this lab gives you the tools to begin making more advanced family content. We explore formulas, family type parameters, materials, and even dabble in some trigonomic functions. So be sure to buckle your seat belt. You are in for an exciting ride!
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		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.
6		MA2604	MA2604 - Drive Autodesk® Inventor® with the Top Down: Alternative Assembly Modeling Techniques Top down, bottom up, skeletal modeling, layout models, multi-body master parts: If you are having difficulty turning your part models into assembly models, do not despair!... View More60 Minutes Lecture Paul Munford	Top down, bottom up, skeletal modeling, layout models, multi-body master parts: If you are having difficulty turning your part models into assembly models, do not despair! There are many alternative assembly techniques that can help you produce great results. This class is for drafters who have made their way through a basic Autodesk Inventor 3D CAD software training course, but who are having difficulty using Inventor on their bespoke, one-off projects. This class focuses on "alternative" assembly modeling techniques in Inventor that can help you build unique models quickly and simply, and without the nightmare of assembly constraints or circular adaptive references. This class will benefit drafters from all engineering and manufacturing industries. Attendees should have working knowledge of Autodesk Inventor. If you produce bespoke, unique, one-off digital prototypes, this class is for you.

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7		CM2720	CM2720 - A Hardware Wonk's Guide to Specifying the Best 3D and BIM Workstations, 2013 Edition The architecture, engineering, and construction applications in Autodesk® Building Design Suite present a special challenge to your IT infrastructure. As you wrestle with the... View More90 Minutes Lecture Matt Stachoni	The architecture, engineering, and construction applications in Autodesk® Building Design Suite present a special challenge to your IT infrastructure. As you wrestle with the computational demands of Autodesk® Revit®-based software, as well as Autodesk® AutoCAD ®, Autodesk 3ds Max® Design, Autodesk® Showcase®, and Autodesk® Navisworks® Manage software, you need the right knowledge to make sound investments in your workstation hardware. Get inside the mind of a certifiable hardware geek and understand all of the variables to consider when purchasing new hardware to support the demands of the BIM and 3D products from Autodesk. Fully updated for 2013, this class gives you the scoop on the latest advancements in operating systems, processors, motherboards, and graphics cards. Learn how each part of your system affects your day-to-day workflow and how to optimize each part. Included in this class is an advanced buying guide for building out the best, most cost-efficient workstations without compromising performance.
8		CR2158-P	CR2158-P - Better, Faster, Stronger: Rebuilding Project Collaboration with Autodesk® BIM 360™ Glue® One of the most common problems we face in the construction industry today is the management and maintenance of trade coordination schedules in complex construction projects,... View More90 Minutes Lecture Tyler Goss	One of the most common problems we face in the construction industry today is the management and maintenance of trade coordination schedules in complex construction projects, which can often take months or years and hundreds or thousands of man hours before a coordinated design can be delivered to the field. Autodesk BIM 360 Glue cloud-based BIM management solution has fundamentally changed Turner Construction’s 3D coordination process. Approaching the process with an integrated and collaborative mindset and willing participants has not only increased workflow quality and productivity—in some cases by up to 300%—but has also significantly cut coordination management costs. This class outlines the best practices for designing a coordination process that takes advantage of the capabilities of BIM 360 Glue, as well as the business case for adopting a cloud-based collaboration platform.
9		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.
10		AB1929-L	AB1929-L - Autodesk® Showcase® 101: An Introduction In this hands-on lab, you experience the step-by-step workflow between Autodesk® Revit® and Autodesk Showcase software. Learn how to quickly and easily transform digital... View More75 Minutes Hands-on Lab Marion Landry	In this hands-on lab, you experience the step-by-step workflow between Autodesk® Revit® and Autodesk Showcase software. Learn how to quickly and easily transform digital prototypes or architectural designs into compelling imagery, movies, and real-time presentations. This class is an introduction to Autodesk Showcase. If you have never used this software before or have used it only a few times, this class is for you. We also discuss Importing models from other sources such as Autodesk® Inventor®, Autodesk® AutoCAD ® and Autodesk® 3ds Max® Design software.
11		FB2585	FB2585 - What Fabricators Want: A Panel Discussion Bridging the gap between design and fabrication without losing design intent can be tricky. At this informative panel, several different fabricators share insights and... View More60 Minutes Panel Jeffrey Mcgrew	Bridging the gap between design and fabrication without losing design intent can be tricky. At this informative panel, several different fabricators share insights and desires when working with designers. We discuss efficient workflows when the design team and fabrication team are separate. The fabricators share more about their process and what sorts of information they really care about. We talk about new tools from Autodesk and others that aid in collaboration, and we review liability and contract concerns when it comes to sharing digital models directly.
12		BO2365	BO2365 - How to Promote Your BIM Work to Drive New Business This class covers how BIM and VDC managers can use blogging and social media to get the word out about their firm's best, most groundbreaking BIM work. BIM blogger Jeff... View More60 Minutes Lecture Curt Moreno	This class covers how BIM and VDC managers can use blogging and social media to get the word out about their firm's best, most groundbreaking BIM work. BIM blogger Jeff Yoders, a contributor to Building Design + Construction and Architectural Products magazines discusses how to get traffic, share best practices, and connect with the larger BIM blogger community. Jeff mentions some of the great BIM blogs out there, such as Laura Handler's (bim)x (Laura is director of VDC at Tocci Building Cos.) and DesignReform (CASE's blog site), and of course, Lynn Allen’s Blog.

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13		CM1482-R	CM1482-R - A Discussion About Overcoming the Challenges Involved in Multi-Firm BIM and IPD Projects We all know that sharing CAD and Building Information Modeling (BIM) data with project team members who are outside of your organization has its challenges—especially in an... View More60 Minutes Roundtable Brett Gatti	We all know that sharing CAD and Building Information Modeling (BIM) data with project team members who are outside of your organization has its challenges—especially in an integrated project delivery (IPD) environment. Each project faces challenges such as data-sharing methods, how often to share data, how to work with geographically dispersed teams, the potential of working with different partners on each project, figuring out who owns what, and solving how the team accesses the data. Attendees of this roundtable session have the benefit of learning what works and what doesn't work on these types of projects based upon real-world, honest feedback from a group of their peers who are living through these project-related challenges. Participants also have the opportunity to share their BIM/IPD experiences with others.
14		MP3917	MP3917 - BIM to Field and Back Again The past decade has seen many changes to both design software and data collection hardware. Methods that were once considered the norm now seem archaic in the eyes of today's... View More60 Minutes Lecture Mark Billingsley	The past decade has seen many changes to both design software and data collection hardware. Methods that were once considered the norm now seem archaic in the eyes of today's engineers and field specialists who utilize new technologies such as the cloud to share information in real time. It is the overall seamless connection between design and field execution that has taken the industry to a new level—allowing for advanced productivity and a more seamless workflow. These once-siloed areas of construction and building management now work together in an integrated fashion. Learn how to take advantage of hardware and software solutions for BIM mapping and data collection that will ultimately improve the overall efficiency of your business.
15		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.
16		DV1823	DV1823 - A 2014 Update to the Autodesk® Revit® Schedule and View APIs The Autodesk Revit API available for views and schedules has been extended with several new exciting capabilities in Autodesk® Revit 2014 software. This class takes a... View More60 Minutes Lecture Scott Conover	The Autodesk Revit API available for views and schedules has been extended with several new exciting capabilities in Autodesk® Revit 2014 software. This class takes a detailed look at what you can do with new view and schedule API capabilities. Topics covered include the newly exposed capabilities for view overrides and filters, crop region manipulation, exploded views and viewport layout. For schedules, the class discusses how to use the newly inherited capabilities of TableView to manipulate and access data directly from the rows and columns of schedules. Simple concepts are illustrated with code examples, and more advanced techniques are demonstrated live. It's helpful to watch the AU online class "CP3133: Using the Autodesk® Revit® Schedule and View APIs" (http://au.autodesk.com/au-online/classes-on-demand/class-catalog/2012/autodesk-revit-for-architects/using-the-autodesk-revit-schedule-and-view-apis) ahead of this class.
17		CR2174	CR2174 - Meeting the Demands of Today's Technology-Driven Construction Projects Over the past several years, the construction industry has adopted new technologies to improve project development and management. However, the temporary jobsite office isn't... View More60 Minutes Panel Steven DelBene	Over the past several years, the construction industry has adopted new technologies to improve project development and management. However, the temporary jobsite office isn't keeping pace with the demands of today's tech-driven construction jobs. This class provides best practices for bringing technology to the jobsite, tips for turning a standard field office into a smart jobsite office, and an overview of cost savings for all parties involved. The presentation also includes recommendations for incorporating BIM processes to help streamline jobsite documentation and lessen rework requests. The best practices shared enhances jobsite collaboration and mobilization while providing solutions for technology challenges in the field. The presentation concludes with a return-on-investment analysis of the various products that are available, including William Scotsman's techsuite™.
18		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.
19		BO2354	BO2354 - Survive and Thrive: Best Financial Practices to Start and Stay in Business In this class, veteran financial advisor Kathryn Amenta—who has counseled small businesses for over 25 years—breaks apart the myths and misconceptions of running a small... View More60 Minutes Lecture Kathryn Amenta	In this class, veteran financial advisor Kathryn Amenta—who has counseled small businesses for over 25 years—breaks apart the myths and misconceptions of running a small business. She offers best practices for managing and operating a small business, from the crucial first steps to the strategies and tactics that will make your business survive and thrive. Amenta also demonstrates what it takes to adapt and prosper through shifts in the economy and industry. Other featured topics include hiring, payroll, billing, advisory boards, business plans, specialization, partnerships, wearing multiple hats, website marketing, business location, perks and discounts, renting versus purchasing, salary, and work hours.

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20		AV3167	AV3167 - Using Storytelling to Create Compelling Experiences with Autodesk® 3ds Max® Autodesk 3ds Max Design software is a great tool for generating high quality visuals, but today’s audience expects more. This class introduces the art of storytelling as a... View More60 Minutes Lecture Ian Hooper	Autodesk 3ds Max Design software is a great tool for generating high quality visuals, but today’s audience expects more. This class introduces the art of storytelling as a means to create compelling experiences that communicate (and sell) design intent and meaning. In our increasingly competitive and visually-oriented society, sophisticated presentations are more important than ever before. Learn how to reconcile the persuasive goals of a presentation with the indulgent demands of the modern audience. Starting with an understanding of the language and repertoire of storytelling techniques, this class guides you through a basic knowledge of rendering and animation features to more complex workflows with characters and real-time ready assets within a narrative framework. Discover the storytelling secrets of Hollywood and Madison Avenue to sell your designs using 3ds Max Design.
21		FM1921	FM1921 - Seeking Breakthrough Outcomes in Projects and Building Whole Life Management This class describes DPR's implementation of integrated project delivery (IPD) to deliver breakthrough project outcomes and to make the digital assets developed for design... View More60 Minutes Lecture Andrew Arnold	This class describes DPR's implementation of integrated project delivery (IPD) to deliver breakthrough project outcomes and to make the digital assets developed for design and construction flow into the owner’s systems to support whole-life facility management. Our clients seek reliable and predictable project outcomes. After handover, their O&M teams seek to reduce the total cost of ownership through building performance and by extending the service life of systems. These goals require us to rethink roles and relationships in terms of measurement and validation, knowledge transfer, and managing facility changes. Integrating design, commission, and test information with integrated workplace and building automation systems helps clients to manage buildings at a lower cost. We will share our experiences in working with clients who understand the business value of IPD based on shared models to achieve breakthrough project and building whole-life management outcomes.
22		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 Family 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.
23		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.
24		FB2068	FB2068 - The Evolution of the Autodesk® Revit® MEP Design Model to Fabrication and Beyond This class shows the evolution of design-to-fabrication workflows within an integrated project delivery team. By adopting the BIM-MEPAUS Autodesk Revit MEP software add-in,... View More60 Minutes Lecture Brett Perez	This class shows the evolution of design-to-fabrication workflows within an integrated project delivery team. By adopting the BIM-MEPAUS Autodesk Revit MEP software add-in, the design model is efficiently passed through to the construction team for development into a constructable LOD 400 model. Within a single Revit MEP model, services are coordinated and approved for construction while data sets are used for procurement. The model is used for ductwork fabrication using Autodesk® Fabrication CADmep™ software in an integrated workflow. Using Autodesk® Navisworks® Manage, the lead coordinating contractor completes the final coordination using the federated model and finalizes site point positioning setouts using positioning points embedded in the model. The model is passed to the site team and used to support installation. The class demonstrates the workflow through real-life projects, providing practical insights into the multiple benefits that can be used by adopting these workflows.
25		MP2721-R	MP2721-R - Volumetric Modeling for Your BIM Workflow In this roundtable session, you learn about generating a powerful data-oriented volume model for Building Information Modeling (BIM) guidelines. The session follows a portion... View More60 Minutes Roundtable Ryan Cameron	In this roundtable session, you learn about generating a powerful data-oriented volume model for Building Information Modeling (BIM) guidelines. The session follows a portion of a well-known national BIM guideline and with the group, discusses the steps to develop a model. As the model evolves, the design authoring/volumetric model grows to include building function and occupancy; building location and envelope construction components, including R-values, SHG coefficient, color and other information. In this session, we discuss uses for the beginning stages of the volumetric model to support early decision making for a building’s position and orientation with property setbacks to gauge the overall look. Attendees are asked to come prepared with basic knowledge of COBIE, NBIMS, BIM execution plans, and advanced knowledge of Autodesk® Revit®-based software. Including this portion of BIM into your current workflow is necessary to ensure National Standards compliance for projects of all types.

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26		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.
27		CI1550	CI1550 - Hydraulics and Hydrology: The Water Resource Tools Available in Autodesk® Infrastructure Design Suite Autodesk has given us a variety of water resource tools in Autodesk Infrastructure Design Suite. If you are a manager or a designer, you need to know if you can stop paying... View More60 Minutes Lecture Dino Lustri	Autodesk has given us a variety of water resource tools in Autodesk Infrastructure Design Suite. If you are a manager or a designer, you need to know if you can stop paying maintenance on competing software and move your organization forward with a single suite of tools. You want to know what is in the suite from someone who does what you do and if it can do the things you need it to do. In this class, you get a better understanding of what equations are being used in which applications and how to find the right fit for the project requirements that are being passed on down to you. We review Storm Sewers, Hydrographs, Express Tools, SSA, and River Analysis. You also learn some tips and tricks that those who already are familiar with these tools can use.
28		MP2489	MP2489 - Collision Course: A Practical Guide to Using Autodesk® Revit® MEP with Autodesk® Navisworks® Manage While construction collisions/clashes are not deliberate in the AEC profession, most of them could have been avoided. This class covers practical techniques, tips, and tricks... View More60 Minutes Lecture David Foley	While construction collisions/clashes are not deliberate in the AEC profession, most of them could have been avoided. This class covers practical techniques, tips, and tricks to effectively manage the data exchange between Autodesk Revit software and Autodesk Navisworks software to detect, resolve, and avoid the unforeseen collisions/clashes that have long plagued design professionals in the AEC industry. We start with an overview of what's required to set up Revit MEP to work with Navisworks on a live construction project, including live examples. We cover proven tips, tricks, and techniques from active practitioners in the fields of architecture, building services, and structural engineering. In the second part of the class, we focus on using the Revit BIM data inside Autodesk Navisworks Manage to produce meaningful clash detection reports, TimeLiner animations, and automation tips to standardize and expedite the process of importing models into Navisworks Manage.
29		RC2261	RC2261 - Laser Scanning Gone Wild: 4D Clash Detection with the Point Cloud Learn how we used laser scanning and Autodesk® Building Design Suite to coordinate the installation of a new chiller and air handling unit in the basement of one of Florida's... View More60 Minutes Lecture Kris Lengieza	Learn how we used laser scanning and Autodesk® Building Design Suite to coordinate the installation of a new chiller and air handling unit in the basement of one of Florida's premier performance venues. We demonstrate how we used Autodesk® ReCap™, Autodesk® Revit®-based software, Autodesk® Navisworks® software, and Apple® iPads® tablets to create a 4D clash detection model to preplan the movement of a 8.5-ton chiller into the existing mechanical room. Because performances scheduled throughout the construction limited downtime, having an efficient process was critical. The virtual design and construction (VDC) team learned the most efficient ways to transfer point cloud files using the ReCap RCS format, perform clash detection in the point cloud in Navisworks, create models, and distribute the information to the team for use in the field. This lean process helped all team members visualize and plan their work, and it provided the owner with a useful as-built model for future work.
30		CR1624-R	CR1624-R - BIM for All: Influencing Company-Wide BIM Adoption Have you ever heard someone in your office say, "That's the BIM guy's job, not mine."? The role of BIM in construction is changing. Soon BIM will be ubiquitous across all of... View More60 Minutes Roundtable nathan wood	Have you ever heard someone in your office say, "That's the BIM guy's job, not mine."? The role of BIM in construction is changing. Soon BIM will be ubiquitous across all of our operations. Currently, most third-party training materials focus on the complete package of tools within the software. Many times this training revolves around the key strokes that are needed to achieve outcomes as designed by the software manufacturer, but fails to meet the specific necessities of the contractor. Instead, we need to adapt our training strategy to focus on how BIM integrates into our current project delivery workflows. By educating our personnel on the process first, we can then break down the technical content to support the idea of just-in-time training. In this roundtable session, we share experiences and lessons learned through our efforts to motivate and influence adoption of model-based project delivery within our operations groups, and we also share examples of ways to track enterprise-level progress.
31	Rec	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.

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32		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®.
33		FB3489	FB3489 - Increasing Productivity with Design Line Design Line is a powerful fabrication tool and this class focuses on getting the most out of it. We discuss valuable Design Line tools and ways of using them in your daily... View More60 Minutes Lecture Scott Hendricks	Design Line is a powerful fabrication tool and this class focuses on getting the most out of it. We discuss valuable Design Line tools and ways of using them in your daily workflow. These tips apply to both Autodesk® Fabrication CADmep™ and Autodesk® Fabrication ESTmep™.
34		CI2877-R	CI2877-R - Transforming the Ecosystem in the Construction Industry In this roundtable session, we share what we accomplished during 2012 and 2013 that added value to our work, from the IT perspective to the directors, managers, and end users... View More60 Minutes Roundtable Valter Pinto	In this roundtable session, we share what we accomplished during 2012 and 2013 that added value to our work, from the IT perspective to the directors, managers, and end users inside Odebrecht and our ecosystem across Latin America with the intention of helping others accomplish the same. To begin with, we have chosen to discuss the Chaglla project, one of the most complex dam and hydroelectric plants that we have in Peru. Also, we show how we started our business transformation using BIM in all countries in Latin America. In the discussion, we share our challenges and our opportunities: moving from 2D to 5D models, using Autodesk® Certification and ADN membership, changing from project licensing to global corporate agreements, and creating tech templates that could be used for airport, roads, highways, subways, and more. We discuss how IT solutions can add value into Odebrecht contracts connecting engineering suppliers, planning, production, quality, and finally, all the stakeholders involved in the field. We also offer our perspective on how to expand this initiative around construction projects everywhere.
35		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 David	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 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.
36		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.
37		CI2254-R	CI2254-R - Developing BIM 4 Infrastructure for the UK Government BIM Initiative This class provides an overview of how Autodesk and Atkins are supporting the UK Government BIM Task Group in delivering a strategy for BIM to add value throughout the... View More60 Minutes Roundtable Anne Kemp	This class provides an overview of how Autodesk and Atkins are supporting the UK Government BIM Task Group in delivering a strategy for BIM to add value throughout the lifecycle of infrastructure projects. A number of public sector clients with significant asset portfolios are involved in the work including the Highways Agency, Environment Agency and Network Rail. The UK BIM initiative proposes clearly defined and consistent information exchange (“data drops” currently based on COBie) at specific decision points along the project lifecycle, to allow clients to validate progress against need and to populate asset data records. Examples of infrastructure clients’ approach to managing asset data are highlighted, showing the information exchange mechanisms being tested and rolled out as part of the general move forward with BIM across the UK infrastructure industry, particularly through integration of geospatial data management and use of the tools in Autodesk® Infrastructure Design Suite.

No	区分	Type	Title	Contents
38		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.
39		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.
40		CR2292	CR2292 - BIM and Barcodes: Taking Full Advantage of Field Data for Construction and Operation This class looks at how BAM Construct UK is developing BIM and taking it to the workface using the cloud and mobile applications. We look at how implementation of Autodesk®... View More90 Minutes Lecture Mark Taylor	This class looks at how BAM Construct UK is developing BIM and taking it to the workface using the cloud and mobile applications. We look at how implementation of Autodesk® BIM 360™ Field cloud service has increased productivity and enhanced safety practices to fulfill BAM's commitment to delivering better buildings. The class covers traditional site process workflows that are used in the UK construction industry and discusses how the advent of cloud computing has changed them, looking at case studies from BAM sites. We look at the interface between Autodesk® Navisworks® Manage software, BIM 360 Field, and our planning software Asta Power Project ™, and discuss interoperability issues that were encountered during implementation. We then demonstrate how BAM is using the system to create commissioning programs that tie into operational phases of buildings using BIM. In closing, we describe how BAM's development in FM with Autodesk products and services has allowed us to directly transfer BIM data directly into a CAFM system.
41		AB2942	AB2942 - Autodesk® Revit® Now Has Explode!...Well, Not Quite Got your attention, didn't I? Well thankfully, not that kind of explode, but rather "exploded" axonometric views. Using the new Displace Elements feature in Autodesk... View More90 Minutes Lecture Paul Aubin	Got your attention, didn't I? Well thankfully, not that kind of explode, but rather "exploded" axonometric views. Using the new Displace Elements feature in Autodesk Revit-based software, we can create custom 3D views that "pull apart" our model to show how it fits together. This powerful tool is a great way to visualize any part of your Revit project. This feature can enhance nearly any kind of communication—from details and presentation views to marketing brochures and even product design documents.The best part is, the displaced view feature is view specific! This means that your exploded 3D view is a unique view of the model that does not affect any other view. However, as you would expect, changes to the main model do affect the exploded view as well. In this class, we walk through the process to create a displaced 3D view. We create the view, enable displacement, learn to move the pieces, and even add path lines to show where they came from. The potential that this tool opens up is vast, so come and have a look at one of the most exciting new features in Revit 2014!
42		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 to 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 fabrication.
43		FB2914	FB2914 - Fabulous Fabrication: Spool, Estimate, and Burn Directly from Autodesk® Revit®, Autodesk® AutoCAD®, or PDF Documents A lot has happened since Autodesk's acquisition 2 years ago of Micro Application Packages Limited. Learn what has happened to the products and see how they actually work. We... View More90 Minutes Lecture William Spier	A lot has happened since Autodesk's acquisition 2 years ago of Micro Application Packages Limited. Learn what has happened to the products and see how they actually work. We expose the tremendous business value that sharing a common database between Autodesk ® Fabrication CADmep™, Autodesk® Fabrication CAMduct™, and Autodesk® Fabrication ESTmep™ design, estimating, and CNC production software brings to your business. Create or change a service instantaneously and see the labor and material costs update along with them. See how content can be hooked to industry standard labor and material catalogs. If you are still spooling, estimating, or sending to the plasma table by hand, this class can change that forever.

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44		AV3906	AV3906 - Design Anywhere, Anytime with Your Accelerated Autodesk Visual Experience from NVIDIA Design anywhere, anytime with your accelerated Autodesk visual experience powered by new client and cloud solutions from NVIDIA while maximizing your investment you've made... View More60 Minutes Lecture Brian Harrison	Design anywhere, anytime with your accelerated Autodesk visual experience powered by new client and cloud solutions from NVIDIA while maximizing your investment you've made in Autodesk® tools. Come to this class to see how you too can make full use of all the benefits of our range of graphics solutions—from client to cloud—for the best Autodesk experience. In this class, you will get a clear understanding of what our client and local cloud graphics do to accelerate and enhance your Autodesk user experience to maximize your productivity. We'll cover new virtualized graphics solutions that solve real problems while providing a workstation experience from any PC or Mac® client so you can work at your client's office or from home to access your designs and do real work. We make virtualization turnkey for Autodesk applications. Come and see how you too can take advantage of all the benefits of our range of graphics solutions from client to cloud for the best Autodesk experience anywhere, anytime.
45		RC2009	RC2009 - How Will Reality Capture Impact BIM in AEC? Design or engineering never sits on its own—it is always part of the real world. With that in mind, the democratization of reality capture has the potential to change the way... View More90 Minutes Panel Elmer Bol	Design or engineering never sits on its own—it is always part of the real world. With that in mind, the democratization of reality capture has the potential to change the way we design and engineer buildings and structures because it enables us to start our design process with something that already exists in the real world. In this class, our panel elaborates on this concept and discusses how advances in reality capture can be an agent of change in the Building Information Modeling (BIM) workflow in architecture, engineering, and construction.
46		MP2153	MP2153 - Automate your Autodesk® Revit®-Based Software Workflows: Let the API Do the Work This class provides a big picture overview of how the API interacts with your projects as well as gives specific training on using the API to automate your workflows. We... View More90 Minutes Lecture David Rushforth	This class provides a big picture overview of how the API interacts with your projects as well as gives specific training on using the API to automate your workflows. We discuss actual time-saving solutions that are made possible with the API, with a focus on giving participants the general understanding and resources needed to start their own API projects. We examine specific code samples, showing how to extract information from elements in linked models, and we cover some practical uses of the raytrace functions of the Revit API. We also present the use of the API to automate data manipulation and discuss the transfer of data from other sources. The class includes discussion of example applications and discussion of ideas for future development.
47		MP1523-L	MP1523-L - Fast Track for Autodesk® AutoCAD® MEP Power Users Being an Autodesk® AutoCAD® Architecture or Autodesk® AutoCAD® MEP user is like being a younger sibling of a over-achieving brother or sister. However, we've got some tricks... View More90 Minutes Hands-on Lab David Butts	Being an Autodesk® AutoCAD® Architecture or Autodesk® AutoCAD® MEP user is like being a younger sibling of a over-achieving brother or sister. However, we've got some tricks up our sleeves and AutoCAD has some tools and features that the Autodesk® Revit® world doesn't have yet. In this hands-on lab, we cover tips for creating and maximizing projects using AutoCAD Architecture, Revit, or plain AutoCAD for MEP design; key features for AutoCAD MEP users that aren't available in Revit MEP; using MEP models for energy analysis and other external applications; and creating custom content quickly for 3D projects. Join us for this information-filled class that helps you be competitive in the BIM world, featuring the longest-tenured MEP modeling product in the Autodesk lineup. And get your hands on some of my tools to help you get started.
48		CR4126	CR4126 - BuildX Forum: Construction Site of the Future No one knows for sure what the job site will look in 10 years—technology will progress, thought leaders will innovate, demands will change—but your goals to win work and be... View More60 Minutes Lecture	No one knows for sure what the job site will look in 10 years—technology will progress, thought leaders will innovate, demands will change—but your goals to win work and be profitable will likely be the same. Join us for this ideas-packed hour designed specifically for contractors and those who work in all areas of the construction industry. We address the real-world challenges you have today and navigate you through the possibilities of tomorrow to improve predictability and productivity. Listen and watch as industry leaders and visionaries illustrate what's possible, and leave inspired to go boldly into the future.
49		CI3284-P	CI3284-P - Autodesk® Vault Professional Meets Alice in Wonderland: Down the Rabbit Hole We Go This class presents an real-world example of a local government trying to introduce Autodesk Vault Professional software, and all of the hidden problems we encountered while... View More90 Minutes Lecture Jason Egge	This class presents an real-world example of a local government trying to introduce Autodesk Vault Professional software, and all of the hidden problems we encountered while doing so. Find out what we learned from the process and some of the issues, including the need to upgrade the server to meet IT department standards, and figuring out how to apply Vault roles and permissions into our business workflows when it has not been mapped out.

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50		FM2226	FM2226 - The Asset Paradigm: Maximizing the Value of BIM for Facilities Management and O&M As Building Information Modeling (BIM) has matured, we have gained the ability to link and integrate data from the BIM model to many other systems. This class focuses on... View More90 Minutes Lecture Andrew Hill	As Building Information Modeling (BIM) has matured, we have gained the ability to link and integrate data from the BIM model to many other systems. This class focuses on integrating BIM with facilities management (FM) and operations and maintenance (O&M). The class describes how we include the FM team during design to enable full integration of systems, as well as integrating facility data to enable access to information from many standard FM products. We review an example of how we applied data to the BIM model and delivered it to the FM products, enabling a familiar interface for FM and O&M managers to manage the facility after construction. We also look at using virtual FM, which enables a facility to be tested during design and construction. This is a must-attend class for building owners and facility managers who want to maximize the benefits of BIM from design to asset management.
51		AB3529-L	AB3529-L - Autodesk® Revit® Architecture Workflow Fundamentals and New Features If you are new to Autodesk Revit Architecture software and want to get a quick hands-on overview of the recommended practices for using BIM in architecture and its associated... View More90 Minutes Hands-on Lab Paul Aubin	If you are new to Autodesk Revit Architecture software and want to get a quick hands-on overview of the recommended practices for using BIM in architecture and its associated workflows, then this is the class for you. We highlight several workflows, including conceptual design, documentation, visualization, and multidiscipline coordination. These workflows highlight the capabilities of Revit Architecture, and touch on some of the Autodesk® BIM 360™ cloud-based offerings as well. In this hands-on lab, you walk through exercises that highlight each of the major phases of design, with an emphasis on recommended workflow, while simultaneously incorporating features that are new to Revit Architecture 2014.
52		CR2436-P	CR2436-P - BIM for Contractors: Field Technology Integration One of my main focuses the past few years has been innovation and integration of technology across all of our projects. Many builders who are implementing BIM are using... View More90 Minutes Lecture David Epps	One of my main focuses the past few years has been innovation and integration of technology across all of our projects. Many builders who are implementing BIM are using Autodesk® Revit®-based software and Autodesk® Navisworks® Manage software for business development and preconstruction, but are missing out on the value of using the model in the field. Learn technical processes and workflows, lessons learned, and implementation strategies from builders who are on the forefront of using BIM and related technology in the field. Field uses of BIM, Revit-based software, Navisworks Manage and the Autodesk® BIM 360™ Glue® cloud-based solution are discussed including visualization, file transfer protocol, coordination and clash detection, 4D construction simulation and scheduling, QC coordination drawings, laser scanning, building layout quality control measurement, linked plans, apps, and mobile technology solutions. If you are interested in either using or understanding how builders are using BIM on a construction site, this practical class is for you.
53		FB2938	FB2938 - Design to Fabrication: Design, Validate, and Fabricate Anything Between Autodesk® Revit® and Autodesk® Inventor® As a design-to-fabrication subject matter expert (SME), I get requests twice a week on average from around the world, asking if and how Autodesk Revit-based software and... View More90 Minutes Lecture William Spier	As a design-to-fabrication subject matter expert (SME), I get requests twice a week on average from around the world, asking if and how Autodesk Revit-based software and Autodesk Inventor software work together, with the most challenging workflow being curtain wall design, fabrication, and installation. In the 2014 release of these products, Autodesk has added technology that vastly improves that workflow. We look at how to use Revit and Inventor together, regardless of which product the design starts in, and we cover all the ways that you can fabricate from either of these products while sharing data back and forth along the way to validate and/or change design intent. We use real-life situations in class as examples, including curtain wall design and concrete formwork, and I encourage participants to bring their own challenges to class for us to tackle together.
54	Rec	MP1429	MP1429 - Get Pumped Up: Pressure Pipe System Curves, Power Loads, and P&ID Validation It’s time to step it up with our Autodesk ® Revit® software pressurized pipe systems. Using examples drawn directly from projects done in Revit, we cover how to build a... View More90 Minutes Lecture Phil Nower	It’s time to step it up with our Autodesk® Revit® software pressurized pipe systems. Using examples drawn directly from projects done in Revit, we cover how to build a model-driven hydraulic system curve (static and friction head loss), set up system coefficient connection settings, produce pipe pressure loss reports, determine the power loads of the system, and validate the Revit model using a Revit piping and instrumentation diagram (P&ID). We explain how you can save time and bring your projects in under budget by streamlining workflows and applying better methods for disseminating information to the team.
55		MP1304	MP1304 - Autodesk® Revit® MEP in the Process Project World When Autodesk Revit software first hit the market, users thought the best place for it would be in the architect world, doing simple, cookie-cutter buildings. Who would have... View More90 Minutes Lecture David Butts	When Autodesk Revit software first hit the market, users thought the best place for it would be in the architect world, doing simple, cookie-cutter buildings. Who would have thought that it could turn out to be a powerful modeler for non-traditional buildings, such as process plants, water treatment plants, or wastewater treatment plants. In this class, we discuss how the MEP tools in Revit benefit these types of jobs; how to work with your content providers to get the best representation possible; how to get more value from BIM models in other products, such as Autodesk® Simulation-based software; and how to position the BIM model to your client and their contractor. Learn what it takes to be competitive in this market with Revit as your primary modeling tool, and do it efficiently.

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56		CM1910	CM1910 - Who Needs a BIM Manager? This BIM management class is designed for CAD and BIM managers, project managers, and other technical and management professionals who want to obtain the relevant knowledge... View More90 Minutes Lecture Paul Morrison	This BIM management class is designed for CAD and BIM managers, project managers, and other technical and management professionals who want to obtain the relevant knowledge and skills that are required to set up a company BIM deployment plan and BIM project execution plan and protocol. We explore everything from making the transition from CAD to BIM to defining roles and structuring teams. We also touch on common issues that arise in all BIM projects and show how crucial it is to have someone there to take care of them.
57		DV1888	DV1888 - Facing the Elephant in the Room: Making Autodesk® Revit® Add-ins That Cooperate with Worksharing The Autodesk Revit API offers the ability to build a wide variety of customizations that drive the contents of projects, elements, and views. Typically the add-in covers the... View More90 Minutes Lecture Scott Conover	The Autodesk Revit API offers the ability to build a wide variety of customizations that drive the contents of projects, elements, and views. Typically the add-in covers the singular case where a single user is operating against the project. However, many projects are large and Revit software work is workshared, with multiple users editing and modifying the project simultaneously. It is important for Revit add-in developers to design their add-ins to “play nicely” in workshared environments. This can include ensuring elements are checked out before trying to modify them, updating and synchronizing changes with central, and opening documents correctly depending on the purpose of the add-in. This class focuses on techniques that can make a well-behaved and useful add-in in the workshared environment, with particular focus on new APIs that have been introduced in Revit 2014. It also covers the similarities and differences in techniques when dealing with server-based worksharing. Attendees should have knowledge of C# and Revit API. Prior experience with Revit worksharing is also helpful. Continue the conversation at "DV3464-R: Making Autodesk® Revit® Add-ins That Cooperate with Worksharing: A Roundtable Session."
58		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!
59		FM3423	FM3423 - Autodesk® InfraWorks™ 2014: Realizing the Potential of a Fully Integrated BIM Process Do you need to rely on as-built documents? Are you responsible for creating conceptual documents and planning studies? This panel discussion explores the use of Autodesk... View More90 Minutes Panel mark hughes	Do you need to rely on as-built documents? Are you responsible for creating conceptual documents and planning studies? This panel discussion explores the use of Autodesk InfraWork software, Autodesk® Revit®-based software, Autodesk® AutoCAD® Civil 3D® software, and Autodesk® Navisworks® software in an integrated BIM process. We explore the process of integrated planning, design, construction, commissioning, and as-built delivery for Denver International Airport.
60		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.
61		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.

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62		CR3099-P	CR3099-P - Prefabrication and Modular Construction A prefabrication strategy allows for the practice of lean concepts, while delivering a successful project. Prefabrication of MEP systems has been used in our industry for... View More60 Minutes Lecture Shannon Lightfoot	A prefabrication strategy allows for the practice of lean concepts, while delivering a successful project. Prefabrication of MEP systems has been used in our industry for some time. A lot of the same benefits are realized in prefabricating architectural building elements. Various projects types fit the mold for prefabrication, including hospitals, institutions, hotels, and industrial facilities. All of these types of projects have something in common: highly-repetitive building components and systems. By incorporating a prefabrication strategy, a number of benefits are achievable, including reducing material handling, construction waste, delivery impacts to a congested site, and schedule. In addition, the quality of work is increased and safety is improved due to the controlled working environment. This class focuses on a recently completed healthcare project in which prefabrication was used and also highlights the challenges that were overcome to deliver a successful project.
63	Rec	AB1263-L	AB1263-L - Using a Sledge Hammer to Give Your Design Some Options Phases and design options are in place to assist in projects. In the CAD world, we would handle these issues with a complex system of layers. Autodesk® Revit®-based software... View More75 Minutes Hands-on Lab Michael Massey	Phases and design options are in place to assist in projects. In the CAD world, we would handle these issues with a complex system of layers. Revit®-based software has tools that work better than layers and will keep your plans, schedules, and sheets coordinated. In this hands-on lab, see firsthand how to properly set up and create both phases and design options. We also explore how both phases and design options work with room data information and schedules.
64		AB1356	AB1356 - Autodesk® Revit® Architecture 2014 New Features Learn about the exciting new features in Autodesk Revit Architecture 2014 software. Get introduced to new concepts of Building Information Modeling (BIM) and efficient,... View More60 Minutes Lecture Michael Zeeveld	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!
65		AC3511	AC3511 - 60 Autodesk® AutoCAD® Tips in 60 Minutes If you want to learn a plethora of power user tips, then be sure to join Cadalyst columnist and Autodesk technical evangelist Lynn Allen as she takes you through a whirlwind... View More60 Minutes Lecture Lynn Allen	If you want to learn a plethora of power user tips, then be sure to join Cadalyst columnist and Autodesk technical evangelist Lynn Allen as she takes you through a whirlwind of productivity techniques that are certain to improve your everyday drawing life. At a tip a minute, you are sure to discover some top secret AutoCAD software features that will remove tedium and boost your ability to meet project deadlines.
66		DV3464-R	DV3464-R - Making Autodesk® Revit® Add-ins That Cooperate with Worksharing: A Roundtable Session Are you an Autodesk Revit-based software developer who has run into issues supporting your add-ins in a workshared environment? Have you hit situations where elements can’t... View More60 Minutes Roundtable Scott Conover	Are you an Autodesk Revit-based software developer who has run into issues supporting your add-ins in a workshared environment? Have you hit situations where elements can’t be edited or updated due to conflicts? As a followup discussion to “DV1888: Facing the Elephant in the Room: Making Autodesk® Revit® Add-ins That Cooperate with Worksharing”, join this roundtable session to further discuss the techniques that are available to developers to operate on workshared models. Bring questions from your own development experience or more detailed questions inspired by the lecture and discuss the possibilities with a group of experienced Revit API developers. Knowledge of C# and Revit API is required, and prior experience with Revit worksharing will be helpful.
67		CR2488	CR2488 - Laser Scanner: Integrated Solution for Complex Construction Projects This class shows the versatility of the laser scanner when it is applied to complex construction projects, and the relevance of point cloud visualization for different... View More60 Minutes Lecture Mario Baez Camargo	This class shows the versatility of the laser scanner when it is applied to complex construction projects, and the relevance of point cloud visualization for different purposes. We explore solutions in various construction phases covering clash detections, cinematic studies, quality control, volume calculation, monitoring of execution during construction, urban environment studies, and hoisting sequence, just to name a few. Also, we explain the process we used with Autodesk® software where the point cloud and the intelligent model can deliver an extraordinarily accurate solution for better decision making.

No	区分	Type	Title	Contents
68		DV3118	DV3118 - Introduction to the Autodesk® BIM 360™ Glue® API In this class, we introduce you to the Autodesk BIM 360 Glue API. The Glue API is composed of 2 parts: a web services API and a display component (viewer). The web services... View More60 Minutes Lecture Manu Venugopal	In this class, we introduce you to the Autodesk BIM 360 Glue API. The Glue API is composed of 2 parts: a web services API and a display component (viewer). The web services API is REST-based. It allows you to access BIM 360 project data in the cloud, such as users, models, and actions. The display component (or viewer API) can be embedded in your application. It provides additional control to its user interface and allows you to customize the viewing experience. Using the Glue API, you can, for example, automate updating projects and models from external applications. Autodesk BIM 360 Glue keeps track of user's actions as data in addition to traditional model-centric information, which can be used for progress tracking, health monitoring of projects, and so on. As BIM 360 Glue is totally cloud-based, you can connect your own web services applications with the Glue projects. We also show you examples of use cases and demonstrate what you can do using the Glue API. This class assumes you have a basic understanding of web programming, such as web services. Working knowledge of the REST API is helpful for understanding the discussion.
69		CR2780-R	CR2780-R - Automated Machine Guidance Is for People? Automated Machine Guidance (AMG) can be a very misleading phrase. While a machine might know what specific elevation a surface needs to be, the operator is responsible for... View More60 Minutes Roundtable Eric Cylwik	Automated Machine Guidance (AMG) can be a very misleading phrase. While a machine might know what specific elevation a surface needs to be, the operator is responsible for the finished grade. It is important that the operator have all of the information and tools necessary to ensure that the equipment is producing proper design conditions. With only grade specified in an AMG model, it is easy for any operator to not truly understand what he or she is grading and the importance of particular grades. This roundtable session focuses on an open dialog about experiences with AMG and what kinds of data should and should not be communicated with the operator. We start this session by showing what Sundt Construction's current practices are for using AMG to communicate with operations personnel and then we discuss how the standards evolved. Next, the discussion opens up for attendees to share their experiences and talk about how the perfect AMG model would look. The true value of an AMG model is how efficiently and quickly it can be executed in the field. If you have any involvement in that process this class is for you.
70		FB2457	FB2457 - Autodesk® Inventor® and Autodesk® Revit® Structure for Precast Structures This class shows how Autodesk Inventor software can be implemented in highly-detailed structural precast elements for concrete geometry and how it can be used for complex... View More60 Minutes Lecture Hector Grajales	This class shows how Autodesk Inventor software can be implemented in highly-detailed structural precast elements for concrete geometry and how it can be used for complex assemblies on bridges or elevated highways. We also show the interoperability between Inventor and Autodesk Revit Structure software for rebar detailing.
71		CR2281	CR2281 - Autodesk® BIM 360™ Field: University Hospital Case Study This case study chronicles the implementation and use of Autodesk BIM 360 Field cloud service on a major capital improvements project. Emphasis is on user groups, use of... View More60 Minutes Lecture Jesse Kassinger	This case study chronicles the implementation and use of Autodesk BIM 360 Field cloud service on a major capital improvements project. Emphasis is on user groups, use of mobile devices in facilitating project management, BIM, commissioning, facilities maintenance and computerized maintenance management systems (CMMS). Additionally, the class includes some discussion on the challenges that were encountered in using Autodesk BIM 360 Field and the solutions that were developed to overcome those challenges.
72		CR2393-L	CR2393-L - Who Says You Can't Interact with Super Models? During this hands-on lab, participants learn how to interact with super models. That's right, taking full advantage of the benefits of the model integration capabilities of... View More75 Minutes Hands-on Lab Matthew Depaolis	During this hands-on lab, participants learn how to interact with super models. That's right, taking full advantage of the benefits of the model integration capabilities of Autodesk® BIM 360™ Field enables you to interact with and capture as-constructed information in your super-sexy intelligent model from the point of construction.

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73		CR2792-R	CR2792-R - Visual Planning: BIM for Safety–The Roundtable Session This roundtable session is a follow-up discussion to "CR2789: Visual Planning: BIM for Safety." The session briefly covers the highlights of the lecture and poses some... View More60 Minutes Roundtable Jason Reece	This roundtable session is a follow-up discussion to "CR2789: Visual Planning: BIM for Safety." The session briefly covers the highlights of the lecture and poses some specific questions to the group about how the concept could be used in innovative ways. The session takes the form of a brainstorming session and value analysis exercise. The floor is open for all ideas, and attendees receive aggregated notes and thoughts from the session as a takeaway. Not everyone is aware of all associated risks and hazards involved with complicated construction operations, even the professionals who perform those tasks every day. Special training is required before commencing this type of challenging and potentially dangerous work. This is where BIM aids in communication and training in a safe environment. BIM safety models can present both correct and incorrect practices side-by-side for comparison.
74		AB2379	AB2379 - BIM + GIS = InfraWOW! Using Autodesk® InfraWorks™ and Autodesk® Revit® to Make Stunning Presentations No building exists in a vacuum. From conceptual energy analysis and shadow studies to neighborhood design motif and materials pallet, the importance of understanding and... View More60 Minutes Lecture Christopher Zoog	No building exists in a vacuum. From conceptual energy analysis and shadow studies to neighborhood design motif and materials pallet, the importance of understanding and responding to a building relationship with its surrounding environment cannot be overstated. Yet showing Autodesk Revit-based software models in their contextual environment has traditionally been a difficult process, often consisting of nothing more than a few “white boxes” manually extruded from CAD surveys. Using the ability of Autodesk InfraWorks 2014 software to import and render massive datasets in real time, architects can present and analyze their designs with the surrounding terrain features, transportation networks, and buildings fully modeled at the block, neighborhood, city, or regional level. Through an examination of real-world case studies, this class explores workflows and sources of free GIS data to unlock the full potential BIM and GIS collaboration, creating stunning presentations along the way.
75		AB2947	AB2947 - Applying Open Standards and Levels of Development (LOD) to Building Information Modeling (BIM) This class helps you explore the actual application of industry BIM standards, such as Industry Foundation Classes, COBie, and Levels of Development. How do these standards... View More60 Minutes Lecture James Vandezande	This class helps you explore the actual application of industry BIM standards, such as Industry Foundation Classes, COBie, and Levels of Development. How do these standards affect professional services agreements and deliverables? How will they affect design team collaboration? How will they support healthy competition while increasing quality and reducing costs for owners? We demonstrate examples of IFC and COBie exporting from Autodesk® Revit®-based software as well as samples of levels of development for use in model-sharing agreements. Extended discussion explores the actual application of industry BIM standards and the effects they have on professional services agreements, project delivery, and collaboration.
76		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.
77		CM1640	CM1640 - IFC: The Good, The Bad, and the Ugly Opinion on the ability of the Industry Foundation Classes format (IFC) to provide the level of exchange necessary is divided: Is it the truly interoperable solution it was... View More60 Minutes Lecture Nigel Davies	Opinion on the ability of the Industry Foundation Classes format (IFC) to provide the level of exchange necessary is divided: Is it the truly interoperable solution it was designed to be? Is it the only option when software vendors refuse to provide direct compatibility? Is it merely a Drawing Exchange Format (DXF) for the 21st century, incapable of providing a level of geometric coordination necessary for the majority of projects? Much has been said over the past 12 months or so about the need for an "Open BIM" solution. Even the UK government talks about “open sharable asset information” and there is plenty of evidence of one "open" solution communicating with another. Evolve Consultancy has worked with many consultants and contractors over the years, exchanging information between Autodesk®, Bentley®, and Graphisoft® authoring and collaboration tools. Is it the IFC standard that is to blame? Can we eliminate these issues? This class explains the key aspects of model structure and organization and how best to exchange coordinated information.

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78		FM2314-R	FM2314-R - Exploring Lifecycle BIM from an Owner’s Perspective In this followup roundtable, AU attendees can discuss Building Information Modeling (BIM) with both Joe Porostosky and Brian Skripac following the class “Overcoming the... View More60 Minutes Roundtable Brian Skripac	In this followup roundtable, AU attendees can discuss Building Information Modeling (BIM) with both Joe Porostosky and Brian Skripac following the class “Overcoming the Challenges of Building and Maintaining 11,000,000 Square Feet of BIM.” BIM has introduced an evolutionary transformation at The Ohio State University. Our goal to model the entire 35 million square feet of campus space by May 2016 requires a well-thought-out implementation strategy and inclusive team approach. This followup discussion provides an extended opportunity to discuss the project. We engage attendees in a conversation about how they, as owners, are using BIM throughout the building lifecycle and discuss existing challenges and potential solutions.
79		CR1453	CR1453 - The 360 Degrees of Field BIM In this class, we present real-life examples of how the processes related to the use of the Autodesk® BIM 360™ Field cloud service and the implication of its use in the field... View More60 Minutes Lecture Tomislav Zigo	In this class, we present real-life examples of how the processes related to the use of the Autodesk® BIM 360™ Field cloud service and the implication of its use in the field are profoundly changing the way we document and transfer project-related information. The ability to streamline day-to-day activities, organize the entire team around the next-generation knowledge-sharing platform and get team members to actively participate in shaping a collaborative solution are some of the benefits resulting from an effectively-deployed mobile technology solution such as BIM 360. At Clayco Inc., the “long view” associated with digital technology enables us to have an integrated practice, and has resulted in a pragmatic and efficient use of BIM-enabled processes for design and construction with the purpose of supporting an innovative practice. This class focuses on the best practices of BIM 360 deployment and the use of information-rich design and construction models.
80		CI2778-R	CI2778-R - AMG Is Not Just for Machines Automated Machine Guidance (AMG) can be a misleading phrase. While a machine knows what specific elevation a surface needs to be, operators are ultimately responsible for the... View More60 Minutes Roundtable Eric Cylwik	Automated Machine Guidance (AMG) can be a misleading phrase. While a machine knows what specific elevation a surface needs to be, operators are ultimately responsible for the grade. It is important that operators have all of the information to ensure that the equipment is producing design conditions. With only grade specified in an AMG model, it is easy for operators to not understand what they are grading and the importance of grades. This class shows how Sundt Construction uses AMG to communicate with operators. If a roadway is changing from a shoulder to a barrier, it is something operators need to know, but it is not something immediately obvious by looking at a view of a surface. By adding line work and text, it is possible to easily communicate hinge points and any other information that might aid the construction process. Learn about the importance of communicating with the operator, what to communicate, and how to do so. If your firm has technology in the field that is providing information to equipment operators, this class is for you.
81		CR2789	CR2789 - Visual Planning: BIM for Safety Not everyone is aware of all of the associated risks and hazards that are involved with complicated construction operations—even the professionals who perform those tasks... View More60 Minutes Lecture Jason Reece	Not everyone is aware of all of the associated risks and hazards that are involved with complicated construction operations—even the professionals who perform those tasks every day. Special training is required before commencing this type of challenging and potentially dangerous work. This is where BIM aids in communication and training in a safe environment. BIM safety models can present both correct and incorrect practices side-by-side for comparison. This class focuses on how models can be developed and used to explain safety hazards and procedures in a safe virtual environment. It shows how BIM tools such as Autodesk® Revit®-based software, Autodesk® Navisworks® Manage, Autodesk® 3ds Max®, and other modeling tools can greatly enhance communication and even help identify common, complex, and unique safety issues. These models can then be taken out into the field using Autodesk tools, such as the Inventor Publisher mobile app, and referenced on tablets, iPads®, and other mobile devices. Continue the discussion by signing up for "CR2792-R Visual Planning: BIM for Safety–The Roundtable Session."
82		MP1654-R	MP1654-R - Exporting from Autodesk® Revit® to Autodesk® AutoCAD® for Collaboration Designers, BIM managers, facility managers, project managers, subcontractors, and marketing engineers are frequently asked to share data, but are not sure about the process.... View More60 Minutes Roundtable Milton Fitzgerald Jr	Designers, BIM managers, facility managers, project managers, subcontractors, and marketing engineers are frequently asked to share data, but are not sure about the process. Typically this task should also be done by the beginning CAD user or BIM user who is looking to move ahead to become an advanced user. Come to this roundtable for a discussion on best practices for sharing information.

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83		BO2832-R	BO2832-R - Design + Collaborate + Build by Technology: As if People Mattered Only a few years ago, we saw the introduction of new technologies such as 3D parametric and intelligent bidirectional design tools. Now we are trying to retrofit them to... View More60 Minutes Roundtable Joseph Joseph	Only a few years ago, we saw the introduction of new technologies such as 3D parametric and intelligent bidirectional design tools. Now we are trying to retrofit them to serve our ability to design and deliver products in ways that are very complex. We've heard a lot about the trends and tools, but we have spent little time addressing the impact on the people in our organizations. We can teach skill sets, but shifting people's approach to design, collaboration, and build among themselves, their consultants, and clients through technology is now an urgent issue that may decide between the success and failure of our financial investments. In this roundtable session, we look at the key variables that keep our staff from embracing this new way of doing business. We provoke the legal, financial, cultural and technological aspects of our transformation, only to realize that we have years of processes to undo to make our new approach worth investing in.
84	Rec	CM1346	CM1346 - Train the Trainer: Make Teaching CAD Fun Do students or coworkers call you Boring Bill, Too Technical Terry, or Monotone Mike? Then this class is for you! Learn how to make teaching CAD fun, not only for your... View More60 Minutes Lecture Thomas Tobin	Do students or coworkers call you Boring Bill, Too Technical Terry, or Monotone Mike? Then this class is for you! Learn how to make teaching CAD fun, not only for your students but for you as well. In today's ever changing technology-based world, we find that there is a need to do more and more training. Whether you are the person in your firm training your co-workers or a professional trainer or instructor, keeping your students interested is critical. Just because you know the technical aspects of CAD, does that mean you are a good instructor? In this class, we look at ways to you make sure your students have confidence that they can use the software after the class is over. Learn how you can get in touch with your class. So whether you've been training for years or have just started and want to pick up some tips, this class can help you out.
85		AC2482	AC2482 - Expanding Autodesk® AutoCAD® Beyond the Desktop to Empower Your Small Business This class covers the use of Autodesk AutoCAD software and the cloud using the Autodesk cloud-based app Autodesk® AutoCAD® 360 (formerly known as AutoCAD® WS). We examine how... View More60 Minutes Lecture Shaun Bryant	This class gives you an introduction to Autodesk® 360 cloud-based services.
86		MP1975-L	MP1975-L - ElumTools™ 2014 Workshop Have you ever wanted to use Autodesk® Revit®-based software to produce point-by-point lighting calculations directly in the Revit model? ElumTools, an add-in for Revit, is... View More75 Minutes Hands-on Lab Hisham Khoury	Have you ever wanted to use Autodesk® Revit®-based software to produce point-by-point lighting calculations directly in the Revit model? ElumTools, an add-in for Revit, is the answer. In this hands-on lab, you learn how to use ElumTools in Revit to achieve point-by-point calculation by using the architectural model and lighting families.
87		AB1357-L	AB1357-L - Autodesk® Revit® Architecture—Cloud! Using only Autodesk Revit software during the schematic design phase of the project enables you to quickly explore design alternatives through iterative design. Tapping into... View More75 Minutes Hands-on Lab Michael Zeeveld	Using only Autodesk Revit software during the schematic design phase of the project enables you to quickly explore design alternatives through iterative design. Tapping into the information-rich models for quantity takeoffs helps to produce more accurate cost estimates, compressing the timeline from design to procurement to construction, virtually eliminating errors and omissions, and reducing the likelihood of RFIs and change orders. With integrated analysis for energy and carbon, you gain design insight where the most important design decisions are made. Perform wind and solar radiation analysis with user-friendly tools. Conduct cloud-based whole building energy analysis with web-based software. Optimize energy efficiency, and work toward carbon neutrality earlier in the design process. With faster, more accurate energy analysis of building design proposals, architects and designers can work with sustainability in mind earlier in the process, plan proactively, and build better.
88		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®.

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89		CR2137	CR2137 - Virtual Success: Suggestions for Virtual Preconstructior Congratulations! Virtual design and construction services are required on your newly-awarded project. This class discusses what actions should be considered during... View More90 Minutes Lecture Mark Decker	Congratulations! Virtual design and construction services are required on your newly-awarded project. This class discusses what actions should be considered during preconstruction to create a successful foundation for construction. From the new AIA contract language to Autodesk® BIM 360™ Field preconstruction checklists, we discuss what information should be the primary focus, when it should be addressed, and what Autodesk products can help you prepare the project for construction.
90		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.
91	Rec	MP1272	MP1272 - Pesky Electrical Settings That Drive You Crazy Autodesk ® Revit® MEP software for electrical engineering is all about coordination. Yes, it does modeling in 3D, but the biggest benefit for electrical is not that it can... View More90 Minutes Lecture Michael Massey	Autodesk® Revit® MEP software for electrical engineering is all about coordination. Yes, it does modeling in 3D, but the biggest benefit for electrical is not that it can model 3D lights. Rather, it is that it produces a coordinated model with the insurance that everything is circuited and documented correctly. Setting up Revit MEP for Electrical can be painful. There are many pesky settings and things that just do not work the way you want them to work. Come and join me as we discuss the major items that I have discovered that keep electrical engineers up at night trying to configure Revit MEP to work the way they want it to. We tackle problems such as editing panel schedules, changing graphics of nested families, working with homeruns, working with hosted fixtures, and working with load classifications. Don’t let Revit MEP get the best of you. Learn how to fix these pesky settings before they drive you crazy!
92		CR3041-L	CR3041-L - Connecting People, Data, and Workflows from Design to Construction with Autodesk® BIM 360 Learn how Autodesk BIM 360 cloud services can help improve collaboration and productivity for design teams and construction professionals, with higher client engagement,... View More90 Minutes Hands-on Lab Paul Walker	Learn how Autodesk BIM 360 cloud services can help improve collaboration and productivity for design teams and construction professionals, with higher client engagement, leading to improved project outcomes. This hands-on lab covers integration with Autodesk ® Revit®-based software, demonstrating simplified collaboration and coordination between design teams; integration with Autodesk® Navisworks®-based software for construction activities such as quantification and 4D simulation; and taking BIM further than preconstruction into the field and beyond with BIM 360 mobile technology.
93		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.
94		MP1507	MP1507 - It's a Mad, Mad, Mad, Mad, Autodesk® Revit® MEP World With apologies to the 1963 classic movie, this class is based on the dying words of a Revit software tips and tricks thief. His last words help spark a class full of users on... View More90 Minutes Lecture David Butts	With apologies to the 1963 classic movie, this class is based on the dying words of a Revit software tips and tricks thief. His last words help spark a class full of users on a mad journey to figure out how to get Revit to work for them in the MEP world. The adventure starts by figuring out the secrets of MEP project and family templates to help start the project out the right way, then moves into clues about custom content and parameters in families. The users then rush into a web of information about customizing views and view templates that shows the way to a clearly documented job, and they reach the finish line with ways to get more out of the model. Learn about the treasure before anyone else, with one of Dr. Shots’ cohorts and latest creations—and win more work with Revit!

No	区分	Type	Title	Contents
95		AB2988	AB2988 - IFC with Autodesk® Revit® for Dummies IFC is a lot like ghosts: some believe it is real, and some believe it is against basic laws of nature. This class will make you believe in ghosts. IFC is real, it’s there... View More90 Minutes Lecture M. De Riet	IFC is a lot like ghosts: some believe it is real, and some believe it is against basic laws of nature. This class will make you believe in ghosts. IFC is real, it’s there and, if you’re a non-US Autodesk Revit software user, chances are that sooner or later you will be forced to work with it. More and more countries are mandating the use of IFC as a deliverable in government projects. And from there, more and more commercial parties will do the same. For those of us working on such projects, IFC is very real. This class focuses on a practical understanding of IFC and how to work with it in Revit: (1) creating mapping tables for import and export of IFC files, (2) using the available options to override these settings on an instance basis, (3) using and modifying the Open Source Sourceforge IFC Exporter, including how to map parameters to IFC properties and how to create and organize custom data in your IFC file, and (5) modeling tips and tricks for a proper export.
96		MP3164	MP3164 - Get Your BIM Head Out of the Cloud This class presents an in-depth look at how to use Autodesk® Revit® MEP software with cloud tools for collaboration workflows in MEP engineering firms. We demonstrate the... View More90 Minutes Lecture Joshua Benoist	This class presents an in-depth look at how to use Autodesk® Revit® MEP software with cloud tools for collaboration workflows in MEP engineering firms. We demonstrate the benefits of various cloud services , such as Autodesk® BIM 360™ Glue®, rendering as a service, and Autodesk® Simulation-based software. What is the big picture and how do the cloud services work together to add much more value than any one program alone? How do these cloud services fit in with Building Information Modeling (BIM) workflows and how can you use them side-by side with Revit MEP? We answer these questions and more as we teach you how to use BIM with cloud to collaborate with your extended design team. Afterwards, join us for the panel discussion "MP3174 Come Fly with Us in the Cloud: BIM Panel Discussion."
97		CR2483	CR2483 - Case Studies: Using Autodesk® Products for 5D Design and Construction in Mexico This class shows the benefits of 5D in different building types. We show examples of 5D in the following: (1) Precast: In Mexico City there are currently 2.3 million cars.... View More90 Minutes Lecture Pablo Lezama Aguilar	This class shows the benefits of 5D in different building types. We show examples of 5D in the following: (1) Precast: In Mexico City there are currently 2.3 million cars. That´s around 1,533 cars per square kilometer, which means a big problem for the population. The main solution for this problem was the construction of an elevated highway. Laser scanning helped us sort out many of the issues. We joined the point cloud and the project model together for clash detection, constructive simulations, cinematic studies, logistics for conflict solution and detailing; (2) Civil: Last year Mexico hosted the G20 summit. Presidents who attended this summit represent 90% of world's GDP. The event took place in a convention center that was built in a record time of 5 months. Using 5D was essential to deliver the building on time. We performed several constructive simulations for detecting schedule deviations, laser scanning for quality control, and daily progress monitoring for stakeholders.
98		GS1998	GS1998 - Autodesk® InfraWorks™: From Concept to Completion In this class, you learn how Autodesk InfraWorks software can be used for your organization’s next infrastructure project in this step-by-step guide to your first view into... View More60 Minutes Lecture Justin James	In this class, you learn how Autodesk InfraWorks software can be used for your organization’s next infrastructure project in this step-by-step guide to your first view into such a unique tool. InfraWorks gives you the ability to place your designs into the real world—think of Google Street View™ in Google Maps™ mapping service—and now place your designs around it using the best of Autodesk® Infrastructure Modeler, Autodesk® AutoCAD® Civil 3D®, and Autodesk® Navisworks® software tools combined. We show you how you can also design in this tool. This approach is a productivity-boosting solution that identifies new workflows beneficial beyond the project team. Finally, you learn how to export your design to the Apple® iPad® and the App Store℠ to provide public involvement, truly promoting your design from the PC to your client, public, and stakeholders.
99		AB2564	AB2564 - The BIM Practice of Lean Project Management in the Design and Construction of Shanghai Tower The story of the 632-meter Shanghai Tower has been referred to worldwide many times, and now here is your chance to meet Mr. Ge Qing, the chief engineer of Shanghai Tower and... View More90 Minutes Lecture Jin Jin	The story of the 632-meter Shanghai Tower has been referred to worldwide many times, and now here is your chance to meet Mr. Ge Qing, the chief engineer of Shanghai Tower and to hear more about the best practices and experience sharing of lean project management from this super highrise and sustainable project. Facing complex skyscraper challenges from both technical and management perspectives, Shanghai Tower Construction & Development became the first owner to deploy a BIM whole lifecycle solution in China. By addressing multiple technologies and software coordination, all of the processes, information, and stakeholders have been integrated through BIM implementation to create higher efficiency, reduce risk, and increase profitability. This class covers aspects of BIM implementation, including the project challenges, strategy of BIM-based lean VDC management, all phases of BIM collaboration, and achievements and benefits for project economy, building management, and social meaning.

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100		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.
101		FB2514	FB2514 - Autodesk® Fabrication: Under the Hood and Undocumented Many users can use Autodesk Fabrication products as well as set up and maintain their Autodesk Fabrication database. But do you know how to migrate from an old MAP... View More90 Minutes Lecture Darren Young	Many users can use Autodesk Fabrication products as well as set up and maintain their Autodesk Fabrication database. But do you know how to migrate from an old MAP (pre-Autodesk) installation to a new version? How do you migrate or load configurations from release to release? Can you deploy and manage your database across multiple locations? How do you tie in your new shop equipment to the database without bringing a consultant on-site? What is the difference between a profile and configuration? Can you keep spoolers from stepping on each other's toes? If you've ever wanted to understand more about how the database is structured and how it works, this is the perfect class for you.
102		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.
103		PL3680-P	PL3680-P - Integrating Autodesk® Vault into BIM Coordination Workflows for Design and Construction Tired of manually uploading and downloading files? Not sure if what you're referencing is really the most "current" file? Is your project team's workflow being hindered by... View More90 Minutes Lecture CHRIS TSCHIRHART	Tired of manually uploading and downloading files? Not sure if what you're referencing is really the most "current" file? Is your project team's workflow being hindered by slow Internet connections? This class provides insight into how our company has used Autodesk® Vault Professional software together with Autodesk® Navisworks software and Autodesk® Buzzsaw® software to create an overall workflow that ensures the right file at the right time for the entire project team. Topics of discussion include setting up Vault to talk to Buzzsaw and Navisworks, Autodesk® Revit®-based software integration, and overall workflow benefits.
104		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.

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105		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.
106		FB1800	FB1800 - Woodworking and Fabrication: Technology Meets Tradition—Unique Methods And Workflows This class provides not only the techniques but the actual working methods and workflows that are used by the top performers in the woodworking and fabrication industry.... View More90 Minutes Lecture Steven Widom	This class provides not only the techniques but the actual working methods and workflows that are used by the top performers in the woodworking and fabrication industry. Software and processes exist that, when working properly together, can perform the tedious steps in a fraction of the time. This class focuses on the how-to, and provides actual workflows that are not out-of-the-box. Learn about unique construction procedures that use the latest versions of Autodesk® AutoCAD® software, Autodesk® Revit®-based software, Autodesk® Inventor® software, and computer-aided manufacturing tools (CAM). Through demonstration and lecture, the class presents methods for the wood trades—tasks that usually take days for architects, designers, engineers, fabricators, and model makers to complete can be cut down to hours. Also using the latest tools in solid-assembly modeling and woodworking-specific feature-recognition technology, we demonstrate how to get from a completely assembled 3D model to machine-ready, nested, NC code with almost no user intervention (controlling machinery).
107		UT2388-L	UT2388-L - Designing Substations Part by Part with Autodesk® Inventor® In the electric utility industry, it seems that everything we design is “just like that one, only different." If you can relate to this statement, then this hands-on lab is... View More90 Minutes Hands-on Lab Terri Humel	In the electric utility industry, it seems that everything we design is “just like that one, only different." If you can relate to this statement, then this hands-on lab is for you. You will gain the ability to increase accuracy, quality, and productivity while improving Building Information Modeling (BIM) workflows when designing electric utility substations using Autodesk® Inventor® software. We demonstrate sketching techniques you can use to easily alter standard content. We show examples of creating, copying, and using standard 3D models to fit any unique situation. Finally, we take you through the procedures to create and update an accurate parts list and quality drawings in a matter of minutes.
108		FB2513	FB2513 - Autodesk® Fabrication Experts Panel Join this ad-hoc informal panel discussion with Autodesk® Fabrication CADmep™, Autodesk® Fabrication ESTmep™, and Autodesk® Fabrication CAMduct™ experts from some of the... View More90 Minutes Panel Darren Young	Join this ad-hoc, informal panel discussion with Autodesk® Fabrication CADmep™, Autodesk® Fabrication ESTmep™, and Autodesk® Fabrication CAMduct™ experts from some of the most successful and largest mechanical contractors in the United States. You get a chance to ask questions, see answers, listen to guidance and advice and learn tips and tricks from some of the industry's power users.
109		BO3703-R	BO3703-R - New Technologies and Their Impact on the Bottom Line In this roundtable session, attendees discuss the implications of the ever-changing world technologies on running a business. Possible topics include (but are not limited... View More90 Minutes Roundtable Jim Balding	In this roundtable session, attendees discuss the implications of the ever-changing world technologies on running a business. Possible topics include (but are not limited to): purchasing, implementation, training, and promoting or marketing their value. This discussion is open to virtually any topic, but we start with BIM, cloud, mobile, digital fabrication, and augmented reality. Attendees are encouraged to contribute to the conversation. Be prepared to not only air "dirty laundry," but provide insight and possible solutions to the issues that might arise. This class is suitable for any size office, it is assumed that those with a larger technology budget will be more interested and involved.
110		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.
111		CI2321-L	CI2321-L - Grid to Ground and Beyond: Advanced Surveying La Transformations, assumed coordinates, local coordinates, custom projections, extended point attributes, geodetic scale factors, convergence angles, high accuracy GIS, DESC... View More90 Minutes Hands-on Lab Lucy Kuhns	Transformations, assumed coordinates, local coordinates, custom projections, extended point attributes, geodetic scale factor convergence angles, high accuracy GIS, DESC key codes, GPS collection, scanner collection, field to finish automation, corridor stakeout…If any of this makes sense to you, then this is the lab to attend. We do a hands-on deep dive to explore each of these topics and you are sure to walk away amazed with the surveying and data positioning powers in Autodesk® Infrastructure Design Suite that you can use to your full advantage.

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112		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.
113		BO2840-R	BO2840-R - Design + Collaborate + Build by Technology: As if People Mattered - REPEAT Only a few years ago, we saw the introduction of new technologies such as 3D parametric and intelligent bidirectional design tools. Now we are trying to retrofit them to... View More90 Minutes Roundtable Joseph Joseph	Only a few years ago, we saw the introduction of new technologies such as 3D parametric and intelligent bidirectional design tools. Now we are trying to retrofit them to serve our ability to design and deliver products in ways that are very complex. We've heard a lot about the trends and tools, but we have spent little time addressing the impact on the people in our organizations. We can teach skill sets, but shifting people's approach to design, collaboration, and build among themselves, their consultants, and clients through technology is now an urgent issue that may decide between the success and failure of our financial investments. In this roundtable session, we look at the key variables that keep our staff from embracing this new way of doing business. We provoke the legal, financial, cultural and technological aspects of our transformation, only to realize that we have years of processes to undo to make our new approach worth investing in.
114		FM2874	FM2874 - From 3D to 6D: Managing the Information Labyrinth of BIM As the definition of Building Information Modeling (BIM) evolves and becomes a better-known and established collaboration process in the building design and construction... View More90 Minutes Lecture Vincent Poon	As the definition of Building Information Modeling (BIM) evolves and becomes a better-known and established collaboration process in the building design and construction industry, owners increasingly require BIM services from construction managers, architects, and engineering firms. AE/C/CM firms are investing in BIM technologies to help them during bidding, preconstruction, construction, and post-construction. Attendees learn methods and best practices for managing BIM information flows from design phases to building maintenance through a series of scenario-based presentations and case studies. This class also discusses the power of integrating specification writing into the BIM workflow. Upon completion of the class, attendees will have a good understanding of how BIM data evolves from design to construction management stages and eventually to building operation and maintenance.
115		CR2499	CR2499 - Stepping into Variable Height Retaining Walls Mechanically-stabilized earth (MSE) walls are inherently complex shapes; smoothly curving in all 3 dimensions while the structure changes shape. Modeling complex geometry for... View More90 Minutes Lecture Eric Cylwik	Mechanically-stabilized earth (MSE) walls are inherently complex shapes; smoothly curving in all 3 dimensions while the structure changes shape. Modeling complex geometry for quantity takeoff, automated machine guidance (AMG), and coordination can be accomplished using Autodesk® AutoCAD® Civil 3D® software with or without the use of Subassembly Composer (SAC). In this advanced class, we create an MSE wall that is based on construction documents. We streamline stepped profile creation, removing a data input bottleneck. We also demonstrate 2 methods for creating MSE wall assemblies and the advantages and disadvantages of using SAC. Moving onto creating the corridor itself, we discuss issues of representing profile steps and how Civil 3D can properly represent necessary detail for MSE walls. After creating the model, we briefly show quantification, visualization, and coordination. All of these steps lead up to exporting the model for AMG to enhance field productivity. At the end of this class a user who knows Civil 3D will be able to easily create a 3D MSE wall. Although this class focuses specifically on MSE walls, these same techniques can be used for any linear structure.
116		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.
117		CR3259-R	CR3259-R - Enterprise Deployment Strategies for Autodesk® BIM 360™ Field Implementing an Apple® iPad®-based field management solution across a largely distributed, multibillion-dollar organization presents unique challenges. In this roundtable... View More60 Minutes Roundtable Dave Burns	Implementing an Apple® iPad®-based field management solution across a largely distributed, multibillion-dollar organization presents unique challenges. In this roundtable session, we take attendees through a series of valuable lessons learned and best practices based on experiences in an enterprise-wide rollout of Autodesk BIM 360 Field cloud-based construction field management software. Topics include a deep dive review of the critical deployment activities, such as planning, communications, setup, training, and monitoring.

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118		CI2302	CI2302 - Vehicle Grounding Checks for Large Vehicle and Load Maneuvers in 3D When OMNNI Associates, Inc., an engineering consultant based in Appleton, Wisconsin, discovered that they were required by their DOT to provide ground conflict analysis for... View More60 Minutes Lecture Nigel Peters	When OMNNI Associates, Inc., an engineering consultant based in Appleton, Wisconsin, discovered that they were required by their DOT to provide ground conflict analysis for oversize, overweight (OSOW) vehicle movements, they contacted Savoy Computing for advice. At the time, Savoy was modeling vehicle turning paths in 3D on surfaces but had not incorporated conflict analysis. Over a number of weeks, Savoy worked closely with OMNNI to understand the requirement and learn precisely how designers would like to see the solution work. Savoy then developed a tool that analyzes the vehicle's path across a 3D surface in seconds and reports ground proximity contours, locations of critical points of ground conflict, and nearest points of conflict as well as automatically creating cross-sections at all critical locations. This class discusses the issues identified by OMNNI and shows how Savoy AutoTrack can be used to perform 3D ground conflict analysis in either Autodesk® AutoCAD® or in Autodesk® AutoCAD® Civil 3D® software.
119		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 and 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 for.
120		CM3094-R	CM3094-R - A CAD/BIM Manager Community CAD and BIM managers deserve professional recognition. Gathering together will enable that to happen. Getting CAD and BIM managers to define their roles will encourage growth... View More60 Minutes Roundtable Mark Kiker	CAD and BIM managers deserve professional recognition. Gathering together will enable that to happen. Getting CAD and BIM managers to define their roles will encourage growth in the industry. At this time it is "every man for himself" and no standards exist for what is expected from a CAD or BIM manager. Companies do not know what they are looking for and managers have no measures to prove their capabilities. Is it time to create a community of CAD/BIM managers with certifications or guidelines for quality?
121		AB3418	AB3418 - Confessions of an Autodesk® AutoCAD® Evangelist Who Discovered BIM Do you use Autodesk AutoCAD software for your building design and documentation? Have you resisted the move to Autodesk® Revit®-based software because it’s too different from... View More60 Minutes Lecture Heidi Hewett	Do you use Autodesk AutoCAD software for your building design and documentation? Have you resisted the move to Autodesk® Revit®-based software because it’s too different from AutoCAD? Do you have valuable data in DWG™ format that you don’t want to lose? Do you think Building Information Modeling (BIM) is too complicated? Do you work exclusively in 2 dimensions, with no need for 3D? Is your time and budget tight? If you answered “yes” to any of these questions, join me, a dedicated AutoCAD evangelist, on my journey to BIM enlightenment.
122		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 the 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 projects.
123		MP2949	MP2949 - From Point Clouds to Construction: Retrofits Explorec This class covers streamlining the process of completing a complex retrofit project, silencing the naysayers that Autodesk® Revit®-based software is not suitable for the... View More60 Minutes Lecture Jason Rostar	This class covers streamlining the process of completing a complex retrofit project, silencing the naysayers that Autodesk® Revit®-based software is not suitable for the task. We investigate converting point cloud data to native Revit elements, indexing an existing conditions model, creating a design model, and using construction detailing applications within Revit to produce accurate documentation.

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124		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.
125		AB1778	AB1778 - As-Built and Conceptual Modeling with Autodesk® ReCap ™, Autodesk® Revit®-Based Software, and Autodesk® AutoCAD® Reality capture is becoming predominant in architectural, engineering, or construction work. Using the Autodesk ReCap family of products and services in conjunction with... View More60 Minutes Lecture Dominique Pouliquen	Reality capture is becoming predominant in architectural, engineering, or construction work. Using the Autodesk ReCap family of products and services in conjunction with Autodesk applications, it's now becoming very easy to design in context using as-built scanned data as a reference. This class teaches you how to take advantage of new workflows based on ReCap software for several use cases that are related to BIM, such as retrofitting a renovation, conceptual modeling, and so on, using both laser scanners and photographs.
126		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.
127		CR2307	CR2307 - Implementing BIM during the Construction Phase of Highway Project This class focuses on the BIM workflows that enabled and supported the construction phase of the M25 highway infrastructure project. We demonstrate how BIM technology and... View More60 Minutes Lecture Siva Koppula	Points have many settings that can help import, create, and manage through style formats, description keys, label components and even layer controls. As we work in Autodesk AutoCAD Civil 3D software, we all start to find ways we can optimize our point data whether it’s by importing, exporting, or creation. In this class, you learn tips and tricks that will help you in your process of working with your Civil 3D points by display through styles. You learn ways to manage these points through groups and examine settings as you manage your point drawing. We also dig deeper into a Civil 3D template to help you manage points through styles and settings. I’m excited to show you options to control your points via a style through layers, text styles, and options using tips I’ve learned in the industry and from training others.
128		DV3292	DV3292 - Engineer-to-Order App Building: Using Autodesk(Configurator 360™ for Rapid Deployment Autodesk Configurator 360 cloud-based product configuration software provides a platform for rapid deployment to the cloud of configuration models that let users configure... View More60 Minutes Lecture Elly Bachracl	Autodesk Configurator 360 cloud-based product configuration software provides a platform for rapid deployment to the cloud (configuration models that let users configure their own basic parts or full engineer-to-order (ETO) rules-driven models and everything in between. But don't stop there! The sky is the limit for processes that can be captured this way. In this class we explore how compact rules can be captured in applications that do many things besides configure products. We learn what these applications can do and how to make them.
129		MP2076-L	MP2076-L - Pushing the System: Linking System Data Between Autodesk® Revit® MEP Models With buildings getting larger, MEP models understandably are getting larger also. In this hands-on lab, we go through the process that is required to split your models into... View More75 Minutes Hands-on Lab Scott Bambling	With buildings getting larger, MEP models understandably are getting larger also. In this hands-on lab, we go through the process that is required to split your models into manageable sections and still allow Building Information Modeling (BIM) data to be used. We cover how to create the necessary families to create the link between the models and discuss which data you can push. Then we examine the process for pushing data manually using database tools. Finally, we cover how to push data programmatically between models using API tools.

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130		CR3150-R	CR3150-R - BIM and Beers: Taking Local User Collaboration to the Next Level in South Florida Sick and tired of the same old user groups? Wish you had a group who really understood what you were working on and could help you overcome some of your hurdles? Lets admit... View More60 Minutes Roundtable Kris Lengieza	Sick and tired of the same old user groups? Wish you had a group who really understood what you were working on and could help you overcome some of your hurdles? Lets admit it: we all need sounding boards, but how do you find those people? In this roundtable session, we share with you how a small group started meeting monthly over beers to discuss our troubles with BIM, and we were shocked at the outcome: pure Guinness...I mean genius. BIM was always designed to improve collaboration, but no one would have thought that it would break down barriers in the local market and help all of us improve our workflow. Conversations often get spirited but also lead to breakthroughs that may have never occurred without an open mind. Our group has made several innovative breakthroughs and in this session, we show you how. Every local market is different, so collaborating with those in your market is key. Come join us as we discuss how it is easy to start a local user group and break down barriers and start collaborating.
131		MP3164	MP3164 - Get Your BIM Head Out of the Cloud This class presents an in-depth look at how to use Autodesk® Revit® MEP software with cloud tools for collaboration workflows in MEP engineering firms. We demonstrate the... View More90 Minutes Lecture Joshua Benoist	This class presents an in-depth look at how to use Autodesk® Revit® MEP software with cloud tools for collaboration workflows in MEP engineering firms. We demonstrate the benefits of various cloud services , such as Autodesk® BIM 360™ Glue®, rendering as a service, and Autodesk® Simulation-based software. What is the big picture and how do the cloud services work together to add much more value than any one program alone? How do these cloud services fit in with Building Information Modeling (BIM) workflows and how can you use them side-by side with Revit MEP? We answer these questions and more as we teach you how to use BIM with cloud to collaborate with your extended design team. Afterwards, join us for the panel discussion "MP3174 Come Fly with Us in the Cloud: BIM Panel Discussion."
132		PL1723-R	PL1723-R - Cloud Surfing: Are You Flying on the Cloud or Crashing to the Earth? Hey you...get off of my cloud! We all need to share information, but how do we unify the tools to get us all onto the same page? The cloud offers an excellent opportunity to... View More60 Minutes Roundtable Tim Bourdois	Hey you...get off of my cloud! We all need to share information, but how do we unify the tools to get us all onto the same page? The cloud offers an excellent opportunity to share information quickly and accurately, but which platform do you choose? With so many cloud collaboration tools suited to different industries, how do you choose a tool that allows for easy data sharing? How do you track changes once the information is shared? How do you keep the attachments out of email systems while making the data available through email links? How do you quickly and easily track compliance, revisions, and updates within your projects? Bring your ideas and tips to share with others in this roundtable session as we discuss ways to make our lives easier through commonly available cloud collaboration tools and methods to standardize cloud-based offerings. After all, companies can't build products if they don't know what we want, and especially if we don't know what we want!
133		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.
134		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.

No	区分	Type	Title	Contents
135		AB2737	AB2737 - BIM Deployment Methodology in a Large Design Enterprise: CAG’s BIM Practice and Escalation This class introduces a proven Building Information Modeling (BIM) strategy and deployment methodology for people, process, and technology at CADRG, a large design... View More60 Minutes Lecture yiming zhou	This class introduces a proven Building Information Modeling (BIM) strategy and deployment methodology for people, process, and technology at CADRG, a large design enterprise. Already a renowned architectural design institute in China, CADRG has made a big effort since 2009 to mobilize its 8,000 professionals and become a leading player in the BIM domain. CADRG has found ways to popularize BIM after 5 years practice and is aiming to deploy BIM across its entire enterprise for design production in the next 5 to 8 years. CADRG believes the experience will influence and drive BIM adoption in other large design firms, especially those in emerging areas such as China. Four projects show how market challenges, kickoff BIM initiatives, project staffing, incentive measurement, calculation of the ROI of human resources, collaboration with the owner and other stakeholders, understanding construction from a design perspective, BIM software localization, and other issues were addressed.
136		AB1345	AB1345 - Transitioning to Building Information Modeling (BIM) with Autodesk® AutoCAD® Architecture Autodesk® AutoCAD® software has done a great job for you so far, but you're ready to start using BIM. You've created some great 2D drawings as architecture, engineering, and... View More60 Minutes Lecture Thomas Tobin	Autodesk® AutoCAD® software has done a great job for you so far, but you're ready to start using BIM. You've created some great 2D drawings as architecture, engineering, and construction (AEC) professionals, but it is time to move forward. Autodesk AutoCAD Architecture is just your first step down the BIM road. See how transitioning from AutoCAD or any basic drafting package to AutoCAD Architecture can be easier than you thought. We explore some of the powerful features available in AutoCAD Architecture that can help you reduce your production time and provide greater control over your drawing process simply by incorporating some basic architectural features into your drawings. See the benefits of wall, door, and window styles. This class is not intended to move you completely to 3D, but to give you more tools to produce your 2D drawings in less time, while still creating a 3D model.