Info fra kursavdelingen

2017 i moderniseringens tegn for Education!
• Flunkende nytt og spennende konsept: SAS Learning Conference!

• To nye utdanningsprogram innen Data Science:
  
  • Vi er i gang med første gruppe i vårt nye 12-måneders program:
    SAS Analytics Value for Data Science
  
  • SAS Academy for Data Science for «hard core» SAS data scientists lansert i elæringsformat

• Erfaringer med Live Web kurs
SAS Learning Conference
A new way of learning!

The SAS Learning Conference gives all SAS Enterprise Guide users the opportunity to share experiences, learn new approaches, best practices, and more. In various learning sessions and workshops, you can work with the software and learn new ways to use SAS Enterprise Guide and SAS programming. You can also bring your own tasks and discuss solutions with a specialist in a personal conversation - “Ask the Expert”.

Using SAS Enterprise Guide:
- Programming
- Task & Menus
- Analytics

- 5 Instructors
- 2 Tracks
- 17 Learning Sessions
- 6 Hands-on Sessions
- Conference Notes & Handout
# SAS Learning Conference

## A new way of learning!

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 - 9:00</td>
<td>Breakfast &amp; Coffee</td>
</tr>
<tr>
<td>9:00 - 9:15</td>
<td>Welcome and Opening</td>
</tr>
<tr>
<td>9:15 - 12:00</td>
<td><strong>SAS Enterprise Guide: SAS Programming</strong></td>
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<tr>
<td></td>
<td>News for SAS programmers in SAS Enterprise Guide version 7, Trond Holmen</td>
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<tr>
<td></td>
<td><strong>SAS Enterprise Guide: Task and Menus</strong></td>
</tr>
<tr>
<td></td>
<td>Descriptive and explorative data analysis in SAS Enterprise Guide, Sara Armandt</td>
</tr>
<tr>
<td></td>
<td>SAS Enterprise Guide editor: Review Editor Options and Tips when creating SAS code, EG Macros</td>
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<tr>
<td></td>
<td>(Abbreviation and Keyboard), Ole Steen &amp; Daniel Ringqvist</td>
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<tr>
<td></td>
<td>Best Practise in SAS Enterprise Guide Projects, News when working with Process Flows in</td>
</tr>
<tr>
<td></td>
<td>SAS Enterprise Guide 7, Gert Nissen</td>
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<tr>
<td></td>
<td>Use the Analyze Program feature to get overview of your SAS program, Gert Nissen</td>
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<tr>
<td></td>
<td>Statistics may be dull, but it has its moments, Sara Armandi</td>
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<tr>
<td></td>
<td>Error handling in SAS Enterprise Guide - Multiple LOG windows, the DATA Step Debugger and more,</td>
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<td></td>
<td>Trond Holmen</td>
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<td></td>
<td>Rapid Predictive Modeler – how to rapidly create predictive models, Karl Berthén</td>
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<tr>
<td>12:00 - 13:00</td>
<td>Lunch and networking</td>
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<tr>
<td>13:00 - 16:30</td>
<td><strong>SAS Enterprise Guide: SAS Programming</strong></td>
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<tr>
<td></td>
<td>Overview of Dictionary Tables, examples of using Dictionary Tables</td>
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<td></td>
<td>and secret ways to access them from a SAS program, Ole Steen &amp; Daniel Ringqvist</td>
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<td></td>
<td>The Analytics Life Cycle in SAS Enterprise Guide – tips and tricks, Karl Berthén</td>
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<tr>
<td></td>
<td><strong>SAS Enterprise Guide: Task and Menus</strong></td>
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<tr>
<td></td>
<td>Title: Use SAS Stored Process in SAS Enterprise Guide to create &quot;SAS applications&quot; for</td>
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<tr>
<td></td>
<td>windows and web, Gert Nissen</td>
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<tr>
<td></td>
<td>Get your data ready for analysis. Learn how to transform your data prior to</td>
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<tr>
<td></td>
<td>analyst’s? Trond Holmen</td>
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<td></td>
<td>Use parallel execution of your code in SAS Enterprise Guide, Gert Nissen</td>
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<tr>
<td></td>
<td>Extending Enterprise Guide with Custom Tasks, where to find them, and how to</td>
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<tr>
<td></td>
<td>build your own, Ole Steen &amp; Daniel Ringqvist</td>
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<tr>
<td></td>
<td>Tips &amp; Tricks – SAS Programming, Ole Steen &amp; Daniel Ringqvist</td>
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<td></td>
<td>An Introduction to ODS Graphics Designer, Sara Armandi</td>
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<td></td>
<td>Tips &amp; Tricks in EG, Using Templates and Favorites menu to organize content in SAS Enterprise</td>
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<tr>
<td></td>
<td>Guide, Trond Holmen</td>
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<tr>
<td>16:30 - 17:00</td>
<td>Closing - The future versions of SAS Enterprise Guide</td>
</tr>
<tr>
<td>17:00 - 19:00</td>
<td>Sandwich &amp; Networking</td>
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</tbody>
</table>
SAS Learning Conference
Where & When

• Oslo, 12. December
• Price: 2.995 NOK per person
  • Special price for you attending the FANS Christmas meeting: 25% discount if you register by Monday!
  • 2018: FANS members receives 25% discount on Learning Conferences
• Read more at www.sas.com/norway/training
  • Choose Training Formats
• Register at website or by email to kurs@nor.sas.com
  • eller ring Ragnhild på 91 575 960!
Analytics Value Training for Data Science

three target groups - approaching common ground

- for Data Scientist (statisticians), 11 days + optionally 12 days SAS tools
- for Business Analysts (users), 11 days + optionally 7 days SAS tools
- for IT Professionals (architects), 11 days + optionally 14 days SAS tools
Analytics Value Training for Data Science
Framework overview 1709

Business Concept: Maturity of Analytics
Data Scientists 11 days + VA and Statistics, Base 1, 2, 3, Data Mining, Machine Learning, Intro SAS to Hadoop

Business Concept: Domain specific
Business Analysts 11 days + VA and Statistics, Enterprise Guide, Accessing SAS from MS Office
IT Professionals 11 days + SAS Base 1, 2, 3, Macro, SQL, DI Studio, Admin, SAS to Hadoop

Innovation Lab and Projects

Sept | Okt | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug

Session 1 | Session 2 | Session 3 | Session 4 | Session 5 | Examination

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Analytics Value Training for Data Science
Mandatory Business and Analytics days (10 + 1 day)

**Session 1**
Day 1: Business
- Introduction, objectives
- Extended DISC, profile matrix
Day 2: Business
- Create value
- Business perspective

**Session 2**
Day 3: Analytics
- Analytics Foundations WS
- Digitalization
Day 4: Business
- Interviewing techniques
- Decision process

**Session 3**
Day 5: Business
- Presentation skills & structure
- Objections & arguments
Day 6: Analytics
- Advanced Analytics
- Process Modelling

**Session 4**
Day 7: Analytics
- Hadoop
- Open Source
Day 8: Analytics
- Data Management WS
- Change 1+2

**Session 5**
Day 9: Business
- Advisory
- Plan & Structure
Day 10: Analytics
- BAMA WS
- Inspiration Session

**Examination**
Test
- Analytics Life Cycle
- Maturity levels
- Profile matrix

**Dates**
- 4+5 Sept
- 12+13 Feb
- 11+12 June
- 20+21 Nov
- 9+10 April
- 1 sept + w35
## Analytics Value Training for Data Science

### Summary

<table>
<thead>
<tr>
<th>Component</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytics day</td>
<td>5 days</td>
</tr>
<tr>
<td>Business &amp; Communication</td>
<td>5 days</td>
</tr>
<tr>
<td>Tool classroom training</td>
<td>up to-16</td>
</tr>
<tr>
<td>Innovation lab (bi-weekly)</td>
<td>21 halfdays</td>
</tr>
<tr>
<td>Case Studies</td>
<td>8</td>
</tr>
<tr>
<td>Business Concept</td>
<td>2</td>
</tr>
<tr>
<td>Personally FANS membership with 10% discount</td>
<td>12 month</td>
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<tr>
<td>Online training</td>
<td>10 modules</td>
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<tr>
<td>E-learning tool courses</td>
<td>5</td>
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<tr>
<td>SAS tool certification</td>
<td>1</td>
</tr>
<tr>
<td>Examination</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Business Concept 1: Maturity of Analytics / Analytics at work

Purpose

- Understand and translate the model "maturity of analytics" and how the DELTA framework would work in a real situation.
- To provide insights and ideas on how analytics can be taken to the next level in your own organization or in a project / business case.

Presentation

- Individual presentation for 1 hour including participants from the participants organization / employer (mgrs.) and participants from SAS.

Disposition

The presentation is 1 hour, divided into:

- Intro, 5 min (Patric Hellgren)
- Summarize the contents of the book "Analytics at Work", 20 min (Participant)
- How should the DELTA model be translated into your own assignment / organization, motivate, 15 min (Participant)
- What do you take from the book, 5 min (Participant)
- Discussion, reflection, 15 min (All)
Case Studies
Applying Data Science Business Case Studies Using SAS

- Case Studies in Lab days – lab days biweekly on Fridays
- To provide insights and ideas on how analytics can be taken to the next level in your own organization or in a project / business case.

Case Study 1 – Performing Headcount Survival Analysis for Employee Retention
Case Study 2 – Detecting Structural Changes and Outliers in Longitudinal Data
Case Study 3 – Explaining Forecast Errors and Deviations
Case Study 4 – Forecasting the Demand for New Products
Case Study 5 – Checking the Alignment with Predefined Pattern
Case Study 6 - Listening to Your Data – Discover Relationships with Unsupervised Analysis Methods
Case Study 7 – Using Monte Carlo Simulations to Understand the Outcome Distribution
Case Study 8 – Studying Complex Systems – Simulating the Monopoly® Board Game
Analytics Value Training for Data Science
Online Training and Business Concept 1804

**Session 1**
Day 1: Business
Day 2: Analytics

**Session 2**
Day 3: Business
Day 4: Analytics

**Session 3**
Day 5: Analytics
Day 6: Business

**Session 4**
Day 7: Analytics
Day 8: Business

**Session 5**
Day 9: Analytics
Day 10: Business

Examination: Test
Final presentation

- Online Training: Analytics Foundations 5 modules, Advanced Analytics 5 modules
- Presentation Business Concepts 1 + 2: Individual with employer
Tilbakemeldinger!

• Det er veldig gode leksjoner! Det er godt å få input spesielt på områder som angår kommunikasjon!

• Veldig mye bra og flinke foredragsholdere. Synes programmet har svart til forventningene så langt. Kanskje litt mye fokus på presentasjonsteknikk og kunne ønsket meg enda større fokus på selve faget/anvendelse og modellering.

• Jeg får mye utbytte av de andre støttekursene jeg legger til for en svært rabattert pris – som jeg setter stor pris på:)

• Veldig bra at dere bringer inn «Case Study» boka til lab dagene. Da får vi diskutert resultatene sammen innad i gruppen. Dette ser jeg frem til!
SAS® Academy for Data Science

Join the classroom right from your desktop

Best in-class virtual training to eliminate travel time and expense. Interact with experts around the globe. Ask questions and get answers in real time.

Learn More
sas.com/sas/data-science-academy
<table>
<thead>
<tr>
<th>Topics</th>
<th>Analytics Value for Data Science</th>
<th>SAS® Certified Big Data</th>
<th>SAS® Certified Advanced Analytics</th>
<th>SAS® Certified Data Scientist</th>
<th>Format</th>
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<tbody>
<tr>
<td>Analytics Foundation / techniques and framework</td>
<td>✓</td>
<td></td>
<td>★</td>
<td></td>
<td>Online + WS</td>
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<tr>
<td>Industry and Business Concepts.</td>
<td></td>
<td></td>
<td>★</td>
<td></td>
<td>Self study + WS</td>
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<tr>
<td>Communication skills with Story Telling.</td>
<td></td>
<td>✓</td>
<td>★</td>
<td></td>
<td>Classroom and WS</td>
</tr>
<tr>
<td>Innovation lab with local SAS expertise</td>
<td>✓</td>
<td></td>
<td>★</td>
<td></td>
<td>SAS lab</td>
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<tr>
<td>Business Value incl models.</td>
<td></td>
<td>✓</td>
<td>★</td>
<td></td>
<td>Classroom and WS</td>
</tr>
<tr>
<td>Case study / Real case learning.</td>
<td></td>
<td>✓</td>
<td>★</td>
<td></td>
<td>SAS lab + WS</td>
</tr>
<tr>
<td>Individual critical SAS tool skills.</td>
<td></td>
<td>✓</td>
<td>★</td>
<td></td>
<td>Classroom, Live web</td>
</tr>
<tr>
<td>Critical SAS programming skills.</td>
<td></td>
<td>✓</td>
<td>★</td>
<td>✓</td>
<td>Self-paced format</td>
</tr>
<tr>
<td>Exploring and visualizing data.</td>
<td></td>
<td>✓</td>
<td>★</td>
<td>✓</td>
<td>Self-paced format</td>
</tr>
<tr>
<td>Working with Hadoop, Hive, Pig and SAS.</td>
<td></td>
<td>✓</td>
<td>★</td>
<td>✓</td>
<td>Self-paced format</td>
</tr>
<tr>
<td>Fundamentals of statistics and analytics.</td>
<td></td>
<td>✓</td>
<td>★</td>
<td>✓</td>
<td>Self-paced format</td>
</tr>
<tr>
<td>Improving data quality for reporting and analytics.</td>
<td></td>
<td>✓</td>
<td>★</td>
<td>✓</td>
<td>Self-paced format</td>
</tr>
<tr>
<td>Accessing, transforming and manipulating data.</td>
<td></td>
<td>✓</td>
<td>★</td>
<td>✓</td>
<td>Self-paced format</td>
</tr>
<tr>
<td>Essential communication skills.</td>
<td></td>
<td>✓</td>
<td>★</td>
<td>✓</td>
<td>Self-paced format</td>
</tr>
<tr>
<td>Machine learning and predictive modeling techniques.</td>
<td></td>
<td>✓</td>
<td>★</td>
<td>✓</td>
<td>Self-paced format</td>
</tr>
<tr>
<td>Work with distributed and in-memory big data sets.</td>
<td></td>
<td>✓</td>
<td>★</td>
<td>✓</td>
<td>Self-paced format</td>
</tr>
<tr>
<td>Pattern detection and experimentation in business.</td>
<td></td>
<td>✓</td>
<td>★</td>
<td>✓</td>
<td>Self-paced format</td>
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<tr>
<td>Optimization techniques.</td>
<td></td>
<td>✓</td>
<td>★</td>
<td>✓</td>
<td>Self-paced format</td>
</tr>
<tr>
<td>Time series forecasting.</td>
<td></td>
<td>✓</td>
<td>★</td>
<td>✓</td>
<td>Self-paced format</td>
</tr>
<tr>
<td>Integrating SAS with R and Python.</td>
<td></td>
<td>✓</td>
<td>★</td>
<td>✓</td>
<td>Self-paced format</td>
</tr>
</tbody>
</table>

Get Analytics Value Examination  Get SAS® Certified Big Data  Get SAS® Certified Advanced Analytics  Get SAS® Certified Data Scientist
Live Web-kurs

- Alle de fire 10-minutts sesjonene på SAS Forum i juni ble fullbooket
  - 27 deltagere meldte seg på «on the fly» og fikk ett gratis Live Web-kurs hver som takk for innsatsen!
  - 6 deltagere har gjennomført et kurs i høsthalvåret, og her er feedback fra noen av disse:

- Live Web Class

- Connected Class
  Jeg var jo med i en connected class. Det var vel meg og et par andre som var på web og resten i klasserommet. Instruktøren glemt noen ganger å unmute mikrofonen, så plutselig ser jeg henne på kamera stå å snakke uten å høre noe, og da hadde hun jo glemt det. Det virker som om det kanskje blir litt mye for instruktøren å holde styr på oss på web i tillegg til de i klasserommet. Hun hadde også noen utfordringer med at bildet hun viste på storskjerm i klasserommet, ikke viste det samme bilde som til oss. Lyden hang også litt etter for meg, slik at når jeg skulle snakke, hadde de jo i realiteten kommet lenger, så det var litt vanskelig. Da var det bedre å skrive. Det er mulig at dette med forsinkelse i lys og hakking på linjen hadde å gjøre med mitt nettverk hjemme også. Jeg tror nok jeg uansett foretrekker å være fysisk tilstede på kurs, eventuelt delta på kun web-classes fremover. Nå var det en kollega av meg som hadde kurs senere den samme uken, og han var strålende fornøyd. Så her er det nok mye smak og behag som spiller inn.
Live Web-kurs

“I have attended the course. I find it very useful for me as a beginner.

There were minor technical issues (I couldn’t use mic sometimes) but that was ok because we still could interact in chat with the teacher. The internet connection wasn’t perfect - this issue is on my side, I think. The rest was perfect.

I really like the teacher - very nice and helpful lady. All the explanations were clear, we had enough time to complete the exercises. I had a lot of questions (and I have more, hehe) and all of them were answered either within the lecture or after it.

It is great that the recordings are available some days after the training. I am actually going through some of them right now.

I am very satisfied with the training and its form.
Very convenient since I took it at home. :)"
Takk fra kursavdelingen som ønsker alle en hyggelig kveld!