Google Summer of code projects 2008

Title: An Add-On to facilitate the existing DSpace Batch Import Procedure

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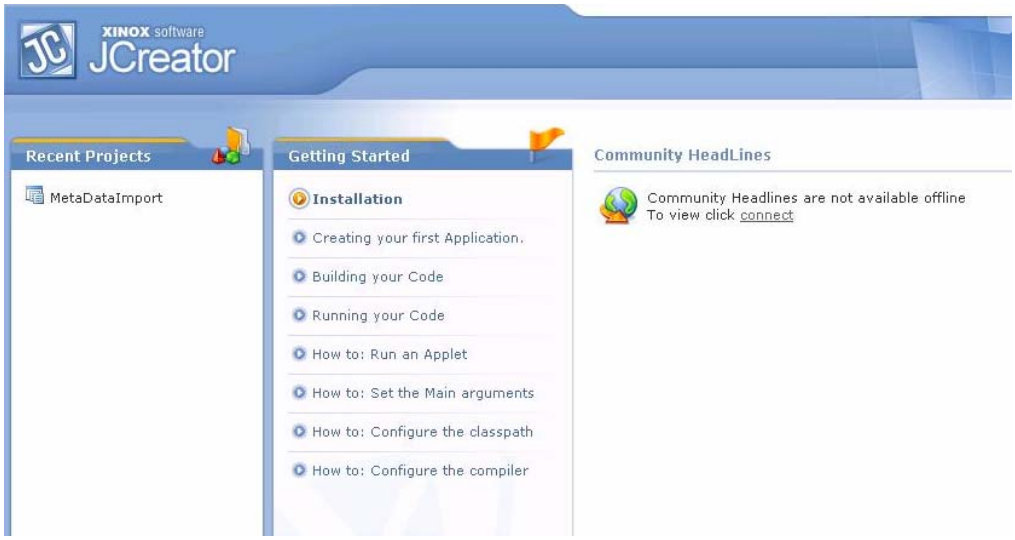
Documentation for Metadata generation program on Windows environment

(1) Install Java SE 6 for Windows
   a. http://java.sun.com/javase/downloads/index.jsp

(2) Install Java IDE, JCreator LE version for Windows
   a. http://www.jcreator.com/download.htm
   b. If you are not familiar with Jcreator IDE, go through the help section "Creating your first application"



(3) Download the given excel sheet (cJE.xls) and save it in your machine. In this program it has been saved at D:\NTUPUBS\cJE.xls. Create 5 PDF documents and save it as follows C:\CEE\Theses\Paper1.pdf, C:\CEE\Theses\Paper2.pdf. This corresponds to the “ResourceLocation” column (last column) in cJE.xls. You may change the document location as you prefer. Make sure that you update the excel sheet column to reflect the correct document location.

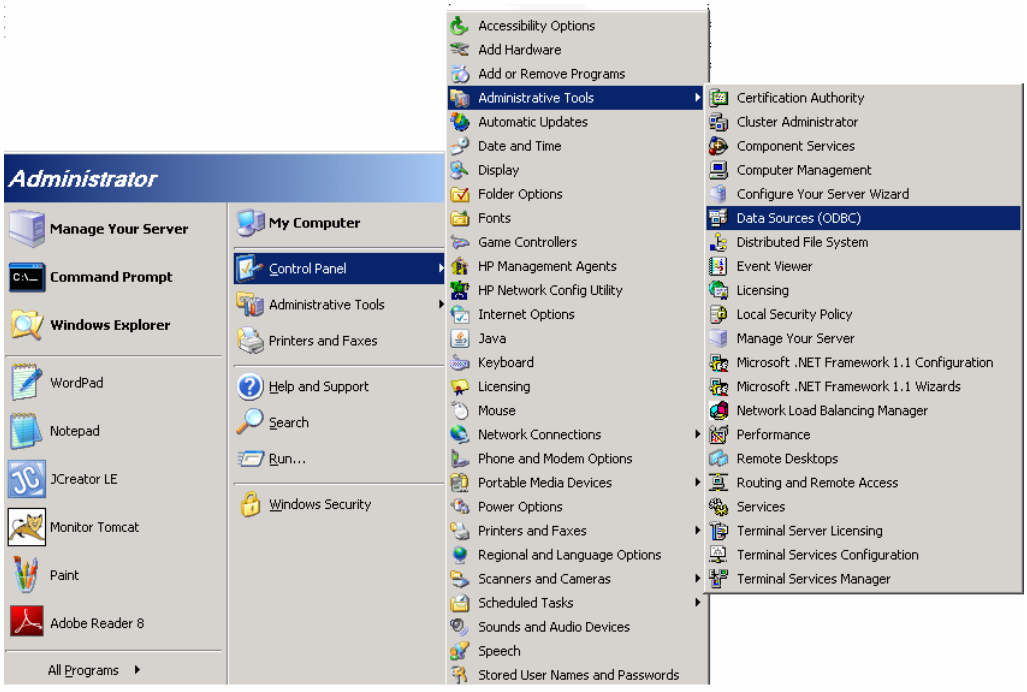
Microsoft Excel Viewer - cEJ.xls

File Edit View Window Help

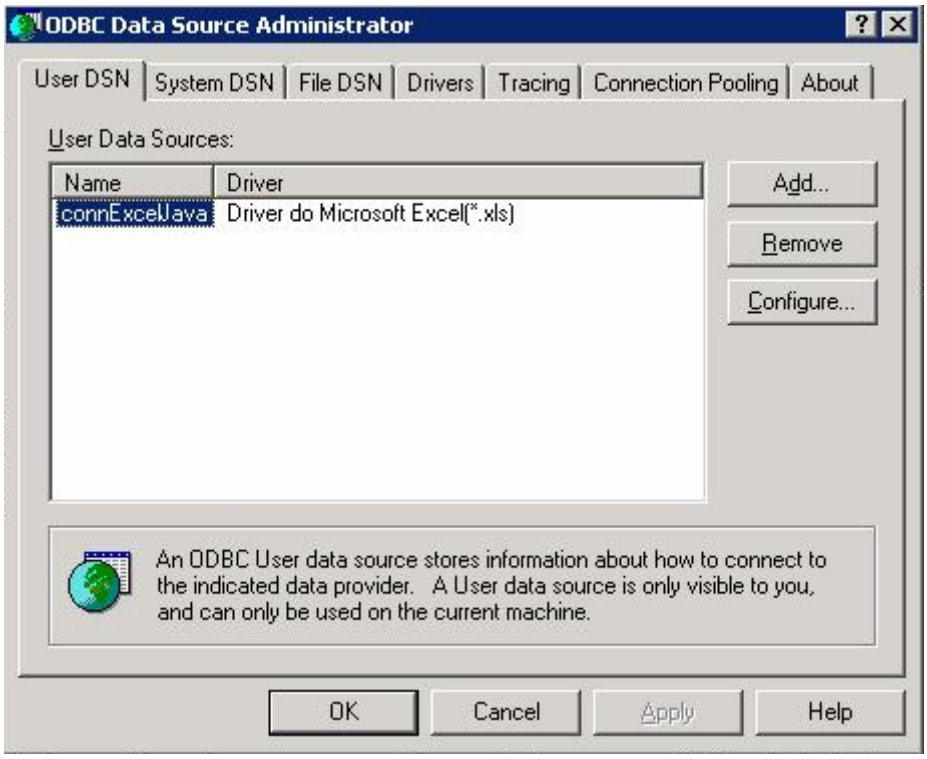
	A	B	C
1	**Title**	**ContributorAuthor**	**DescriptionAbstract**
2	Heave response of a floating vertical cylinder	Adi Kurniawan.	##########
3	Hydraulic properties of residual soils.	Agus Setianto Samingan.	##########
4	Strutural damage identification with	Akshay Surendra Kumar Naidu.	##########
5	Design wind speed in areas with mixed	Andhi Tanurdjaja.	##########
6	Integration of intersection performance in	Anggraini Zulkati.	##########
7	Inbibitory effects of ammonium,	Ang, Suay Siong.	##########
8	Surface street network simulation studies	Ang, Sze Chan.	##########
9	Evaluation of soil parameters from results of	Fernando, Antony Trevor.	Case studies of piezocone tests in offshore
10	Engineering characteristics of residual soil	Aung, Kyaw Kyaw.	In this research, index properties and
11	Application of activated carbon in water	Bhavana Gupta.	##########
12	Spatial characteristics of goods vehicles in	Bhupendra Singh Baliyan.	##########
13	Tunnel engineering system (TES)	Bian Haiying.	##########
14	Study of characteristics of taxi services in	Muthu, Biju.	##########
15	Ground settlement of NATM tunnels at	Birsen Zeyrek.	##########
16	Deformation of ultra-soft soil.	Bo, Myint Win.	##########

(4) Create a DSN (Microsoft Excel Driver) as shown below. If there are security concerns installing MS Office - Excel on your dedicated server, MS Office Excel Viewer could be implemented to support this application.

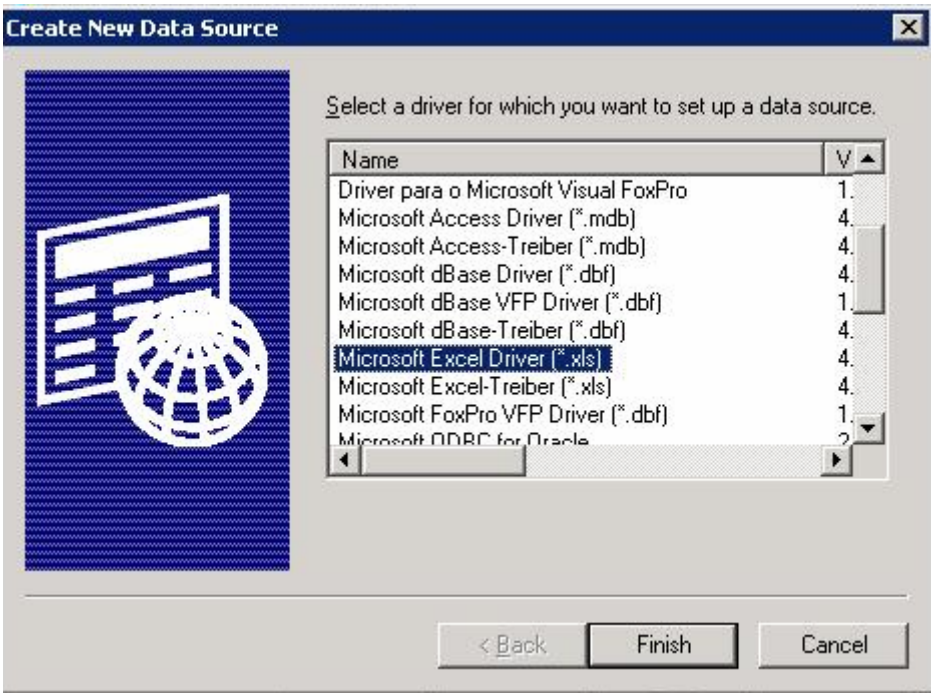
a. Start – Control Panel – Administrative Tools – Data sources (ODBC)



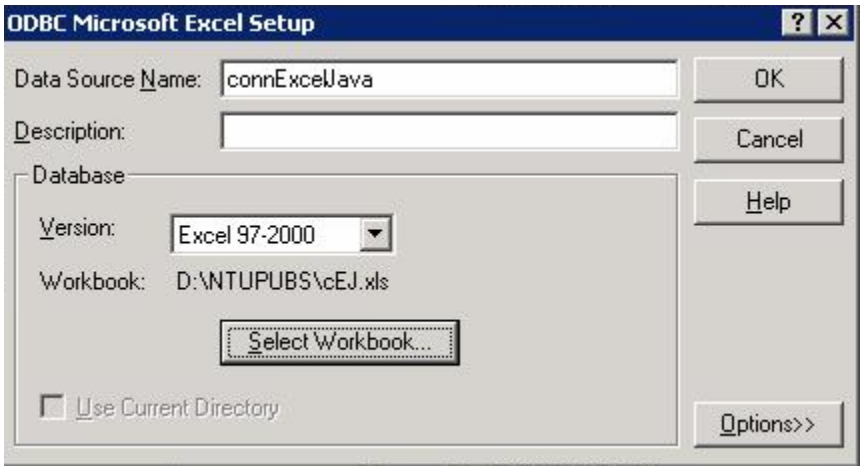
b. Click the Add button



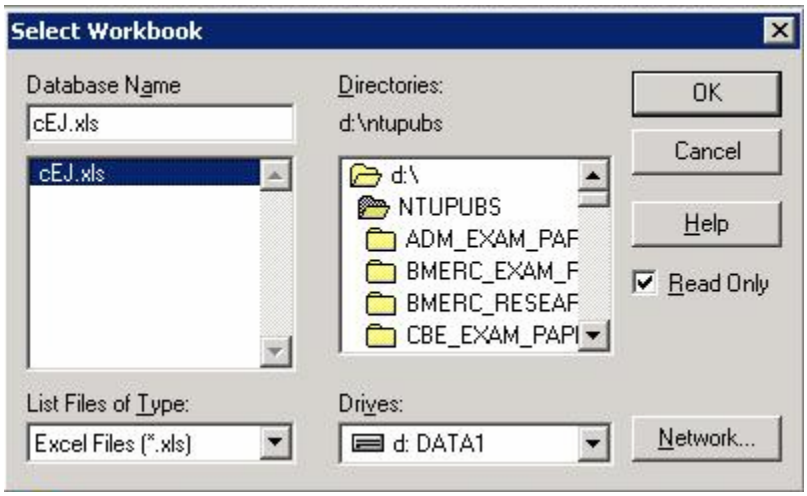
c. Select MS Office Excel driver and click Finish.



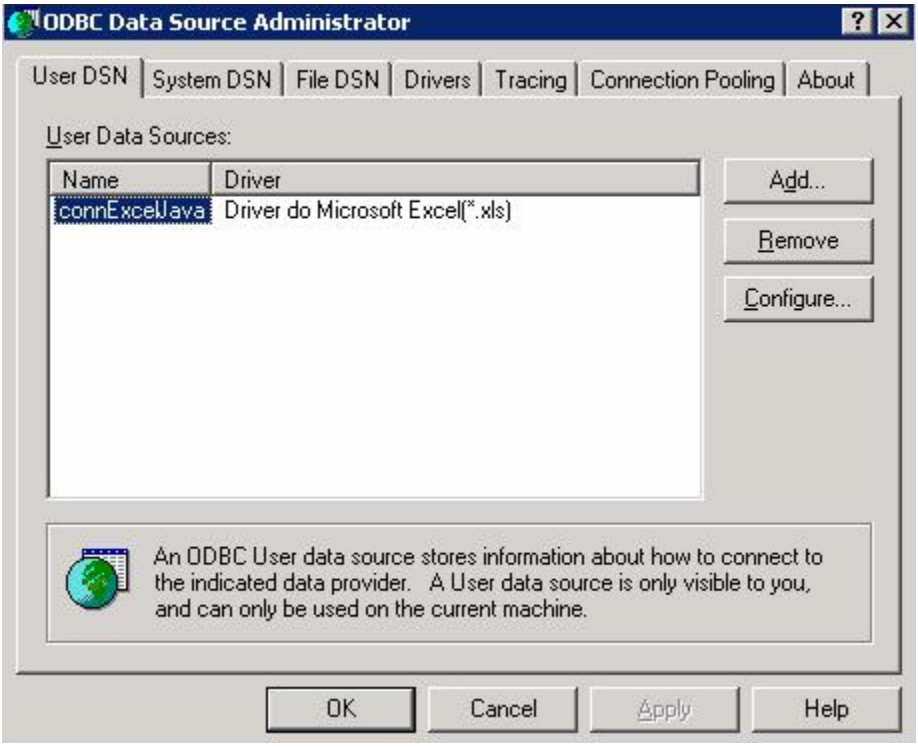
d. Give the name of DSN name as connExcelJava



e. Click the "Select workbook" button to choose the excel sheet. In the figure excel sheet location is given as D:\NTUPUBS\cEJ.xls and the Excel sheet is cEJ.xls. Click Ok.

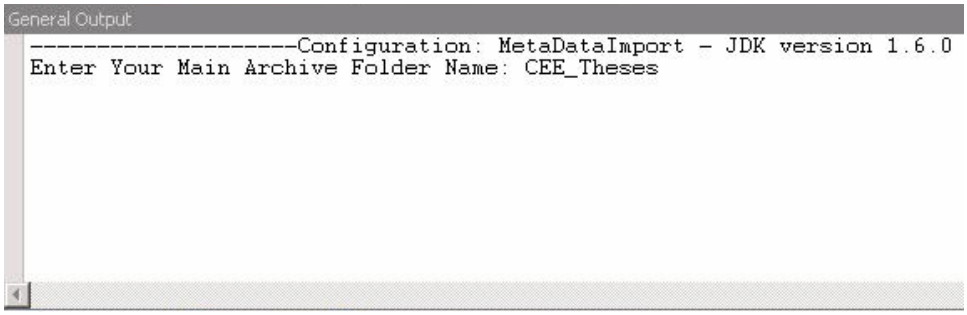


f. Once DSN for Excel driver is created as given below, click ok.

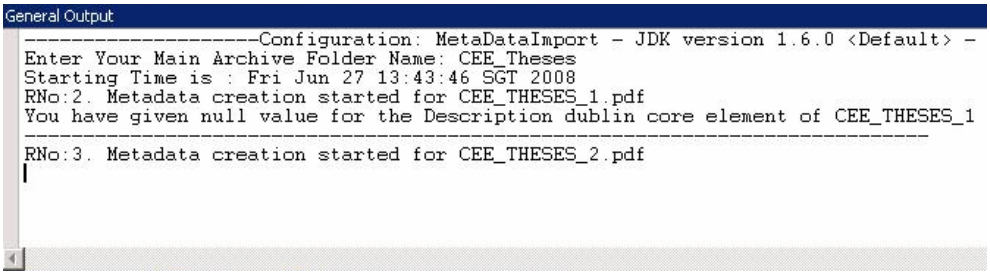


(5) Build and run the MetaDataImport program using the IDE. Make sure that your class name is given as MetaDataImport.

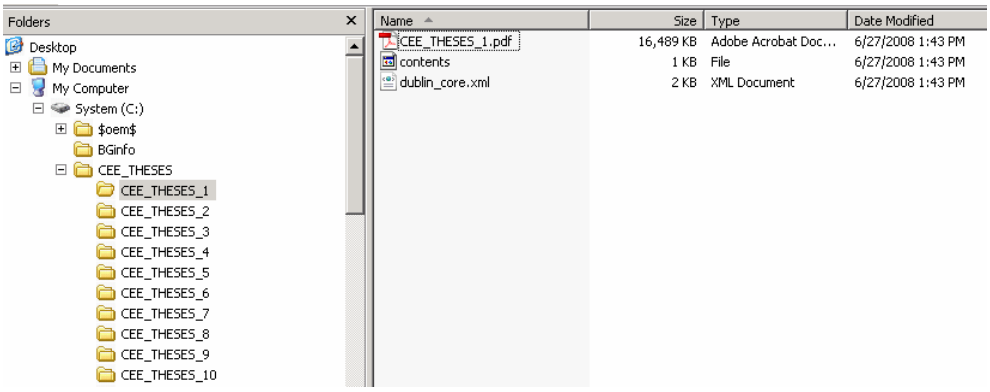
(6) Enter your main Submission Information Package (SIP) name when the editor prompts. Here it is given CEE_Theses.



(7) The submission information package gets generated and the first SIP folder name is CEE_THESES_1.



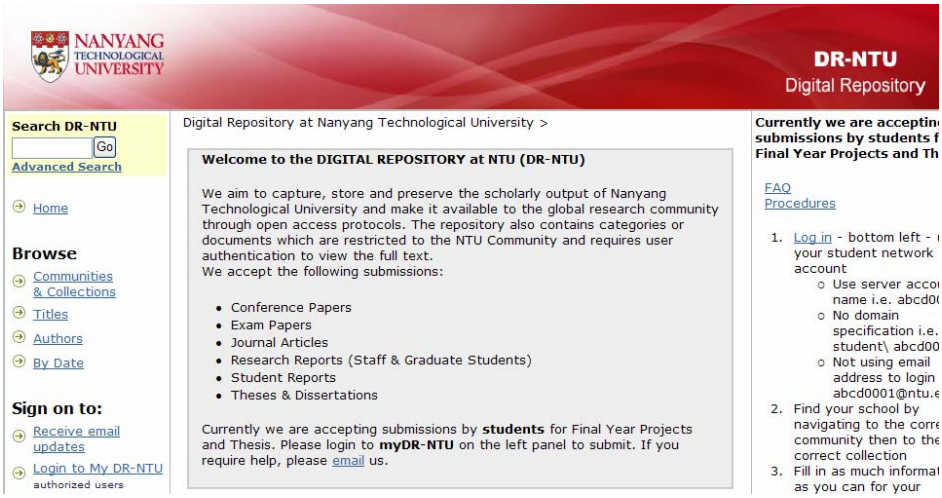
(8) The CEE_THESES_1 folder contains 3 files required for DSpace batch import. The contents file contain the name of digital resource i.e. CEE_THESES_1.pdf in this case.



(9) The Dublin core file generated for this SIP is shown below.

```
<?xml version="1.0" encoding="iso-8859-1" ?>
<!-- title of pdf CEE_THESES_1.pdf -->
<dublin_core>
  <dcvalue element="title" qualifier="none">Heave response of a floating vertical cylinder with built- in tuned mass
    damper.</dcvalue>
  <dcvalue element="contributor" qualifier="author">Adi Kurniawan.</dcvalue>
  <dcvalue element="description" qualifier="abstract">Novel concepts of floating structures continue to be proposed with
    applications ranging from hydrocarbons exploitation to the possible inhabitation of the ocean. As floating structures move
    freely in 6 degree-of-freedoms, reducing their motions in response to environmental forces is a challenging task. Among the
    various motion reduction mechanisms, the tuned mass damper (TMD) still has limited use in floating structures. In the
    current research, the feasibility of TMD to reduce the heave response of a freely floating vertical circular cylinder is
    investigated. The TMD is designed and positioned inside the cylinder without significantly altering the hydrostatic stability of
    the structure. A combination of theoretical, experimental, and numerical studies is employed in the investigation.</dcvalue>
  <dcvalue element="contributor" qualifier="advisor">Not In List</dcvalue>
  <dcvalue element="date" qualifier="copyright">2006</dcvalue>
  <dcvalue element="date" qualifier="issued">2006</dcvalue>
  <dcvalue element="description" qualifier="degree">MASTER OF ENGINEERING (CEE)</dcvalue>
  <dcvalue element="rights" qualifier="none">Nanyang Technological University</dcvalue>
  <dcvalue element="contributor" qualifier="department">School of Civil and Environmental Engineering</dcvalue>
  <dcvalue element="type" qualifier="none">Thesis</dcvalue>
</dublin_core>
```

(10) In this example we are importing the generated SIPs into the collection "CEE_Theses" having the handler id - 123456789/68186. Before starting the import, the "CEE_Theses" collection has to be created in the DSpace repository as shown below using a DSpace Administrator account. A repository interface and the "CEE_Theses" collection interface are shown below.



(11) To import the SIPs generated into the collection “CEE_Theses”, issue the general DSpace ItemImport command at the command line interface as given below. The collection handler for “CEE_Theses” is 123456789/68186 and the SIP main folder is at C:\CEE_THESES. Replace adminemail@ntu.edu.sg with your DSpace administration account. The mapfile for this example is given as mapfileCEE_Theses that may be changed.

C:\DSpace\bin>dsrun org.dspace.app.itemimport.ItemImport –a –e adminemail@ntu.edu.sg –c 123456789/68186 –s C:\CEE_THESES –m mapfileCEE_Theses

(12) A sample metadata description for an imported item is shown below.

DC Field	Value
dc.contributor.advisor	Show Kuan Yeow
dc.contributor.author	Foong, Shiu Feng.
dc.date.accessioned	2008-06-26T04:52:26Z
dc.date.available	2008-06-26T04:52:26Z
dc.date.copyright	2004
dc.date.issued	2004
dc.identifier.uri	http://hdl.handle.net/113456789/68707
dc.description.abstract	This study included a treatability study of the wastewater characteristics through examination of its biochemical oxygen demand (BOD), chemical oxygen demand (COD), pH, total and volatile suspended solids (TSS and VSS) and others. The possibility of accelerating the start-up time and granulation process in UASB reactors was investigated with addition of 1, 2 and 4 mg polymer/g SS in three laboratoryscale UASB reactors. Further investigation into optimising the polymer additions was investigated through adding biweekly polymer dosages into the reactors in the last phase.
dc.rights	Nanyang Technological University
dc.title	Accelerated start-up and granulation in polymer-enhanced UASB bioreactors treating industrial food-processing wastewater.
dc.type	Thesis
dc.contributor.department	School of Civil and Environmental Engineering
dc.description.degree	MASTER OF ENGINEERING (CEE)
Appears in Collections:	CEE THESES